THE WIFE'S HANDBOOK

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THE WIFE'S HANDBOOK

by

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INTRODUCTION

The name of this book was selected after considerable thought. The book deals with subjects which should be considered by both husband and wife in their married life, but it is named The Wife's Handbook because it is felt that several chapters are altogether for the wife, and the remaining chapters contain information of value to a wife, and of especial value to a widow.

Our wives have no business instruction, and practically no instruction concerning matters sexual, for it cannot be said that the vague and indefinite teachings of their mothers are of real value.

It is sad but true that the modern wife does not know her business. The husband's business is to provide the funds for the sustenance and clothing of the family. The wife's business is to care for the family. These duties in the ordinary family comprise purchase of food and clothing, cooking, bearing and care and education of children. The man begins after school days, and often during school days, to educate himself in the business of a husband, that is, a provider. The woman is rarely taught her duties before marriage, often she takes pride in her lack of business education, and supposedly her chief asset for marriage is her innocence or complete lack of knowledge of sexual matters. This would be all right if she learned her duties shortly after marriage, as the man similarly continues after marriage to add to his knowledge and income as the husband and provider. But the woman rarely acquires much greater knowledge; she learns a few things concerning care of house, learns a little about the sexual life, but she does not learn to attend systematically to her duties.

This is not strange, and the wife is not altogether to be blamed. For example, take the chapter on accounts. This chapter is written by a bookkeeper. To evolve a similar scheme of keeping accounts, a woman must acquire a knowledge of bookkeeping, either self-taught or at a business college. All wives of value have evolved for themselves a system somewhat similar to this one, but few wives can take a course at a business college and thereby become excellent accountants.

Take another example; the chapter on Married Sexual Life. The author has asked doctors and other professional men for books containing the information herein. No book has it all; doctors have stated that there is no such book. The author is confident that no woman and very few men know the facts here presented. Previous books about sexual life seem generally to have been written by ministers and are principally sermons on sexual theology rather than facts on sexual physiology.

There is nothing unusual in this book; nothing startling. It can nearly all be found in books and lectures by people who know the subject. After each important subject is a list of good reference books, with cost of each. In these books may be found more complete information regarding certain facts of the subjects briefly discussed.

NOTICE

Purchasers have written me letters requesting me to buy for them reference books or articles of equipment, etc., mentioned in the various chapters of the book. The author is willing to do this, provided the money is sent in advance. There is no desire to advertise any particular reference book or article of equipment. The author is not paid to mention these in this book, and will remove them if any progress of science or invention produces a better. However, the author will send any reference book or article at the price stated, this price being the same which must be paid any ordinary dealer. The author, of course, makes the same commission as the ordinary dealer.

CHAPTER I

FOOD

General remarks: appetite best guide. FOOD VALUES: classification, proteids, fats, carbohydrates, calories. TABLES: units of proteids, fats and carbohydrates required; number of calories required for baby, child, girl, woman, and men at different kinds of work; calculations to obtain calories; table of calories in various articles of food. TABLES OF MEALS: for baby, child, girl, boy; and meals for week each in January, April, July and October for office man, for laborer. HOW TO DETECT FOOD WHICH IS DISEASED; UNSOUND; OR UNWHOLESOME AND UNFIT FOR HUMAN FOOD: animals; poultry and game; fish; fruits and vegetables; corn; bread and flour; eggs; butter; milk and water. FOOD IN SEASON: table of seasonable food in spring, summer, fall, winter. DIGESTION: table of length of time to digest various articles of food. STIMULANTS: effect of alcohol, tea, and coffee. DIET: diet for sick persons; diet for fat and thin persons; table of foods arranged in order of fattening qualities; diet for brain workers; diet for different climates and different seasons of the year.

CHAPTER II

COOKING

General remarks. EQUIPMENT: articles for kitchen; comparison of cost of coal and wood, gasoline, gas, and electricity; articles for dining room. USES OF FOOD NOT EATEN: stock; meats; eggs; butter; potatoes; cheese; rice; vegetables; fruits. GUEST BOX: necessary articles. RECIPES: object of cooking; methods of cooking. MEAT: thirteen recipes. POULTRY AND GAME: twelve recipes. BEVERAGES: four recipes. BREAD: ten recipes. VEGETABLES: nineteen recipes. SOUPS, ETC.: five recipes. SALADS, DRESSINGS, ETC.: thirteen recipes. SAUCES, PICKLES, ETC.: six recipes. DESSERTS, PUDDINGS, PIES, CAKES, ETC.: thirty-five recipes.

CHAPTER III

SERVANTS

General remarks. RULES TO KEEP ONE: characteristics of French, Polish, Swedish, German, Irish, Negro, American. EMPLOYMENT: methods of obtaining. DUTIES: list for one servant, for cook and maid, for cook and man. WAGES: for one servant, cook and maid, man, in east, south, Chicago, Seattle, farms. ADVICE: treatment; furniture for room.

CHAPTER IV

CLOTHING

General remarks. HYGIENE: explanation of effect on health of different kinds of clothes; clothing table for winter, summer; shoes. SELECTION OF CLOTHING. CLEANING AND DYEING: dry cleaning; how to remove grease, paint, tar, grass stains, etc.; wet cleaning; dyeing; finishing. STORING CLOTHING, FURS, ETC.; clothes; shawls; blankets; rugs; carpets; furs. SEWING: equipment; patching; darning. TASTE: colors best suited to different types, blonde or brunette.

CHAPTER V

FURNITURE

General remarks. HISTORY: Egyptian; Pompeian; Gothic; Renaissance; Louis XIV; Louis XV and XVI; Empire; Elizabethan; Chippendale; Mission. TABLES OF NECESSARY FURNITURE: front porch; hall; parlor; library; bedroom; dining room; bathroom; servant's room; guest room; back porch; cellar. SELECTION: shrinking; sawing; leather; beds; rugs; antiques; veneering. CARE OF FURNITURE: paints; varnishes, etc.; stains; fillers; operation of painting or varnishing; removing or cleaning old paint; quantities needed; broken furniture; scratches, etc.; dents; wall paper; cost per room, house cleaning.

CHAPTER VI

MEDICINE

General remarks. NURSING: care of the sick room; heating and ventilation; care of the patient; methods of giving baths; temperature; bedsores; taking temperature; rules; respiration; medicines; food; broth; application of heat and cold by poultices, stupes, packs, ice coil, etc.; infectious and contagious cases; convalescents; special points; the dying and dead. MEDICINE CHEST: complete family chest; settlers' or campers' medicine case; medicine pocket case; costs; contents. CAUSES OF VARIOUS DISEASES: appendicitis; bubonic plague; cholera; diabetes; diphtheria; dysentery; gout; malaria; measles; mumps; pneumonia; scarlet fever; smallpox; tonsilitis; tuberculosis; typhoid fever; whooping cough. RULES FOR HEALTH: antiseptics; bathing; constipation; eyes; exercise; flies and mosquitoes; teeth; ventilation; water. HOME TREATMENT: appendicitis; loss of appetite; billiousness; blood poison; boils; broken limbs; burns; chills; choking; cholera morbus; colic or cramps; constipation; corns; cough; croup; cuts; diarrhœa; diphtheria; drowning; earache; epilepsy; fainting; fever; hair; headache; hiccough; hysteria; insomnia; intoxication; bleeding lungs; malaria; measles; mumps; nosebleed; pain; pneumonia; poison; rheumatism; scarlet fever; sleeplessness; smallpox; snake bite; sprains; suffocation; sunstroke; sore throat; tonsilitis; toothache; typhoid fever; unconsciousness; vomiting; warts; whooping cough; wounds. CAMPING: health rules.

CHAPTER VII

ETIQUETTE

General remarks. INTRODUCTIONS. CALLS: cards; forms, sizes. WEDDINGS: forms of invitations; guests; gifts; expenses, by whom paid; reception at house after wedding. LETTERS. DINNERS: invitations; courses; setting table. DANCES: invitations; conduct at dance. HOUSE GUESTS. TIPS. OTHER POINTS: theater; riding; presents.

CHAPTER VIII

ACCOUNTS

General remarks. NECESSITY FOR ACCOUNT KEEPING. HOUSEHOLD DUTIES: customs; allowances; various systems, one recommended. VARIOUS METHODS OF SAVING: groceries; butcher; milkman; food in season; clothing; receipts; kitchen economies; absurd economies. EXPERIENCES OF OTHERS: financial budgets of many good housekeepers; expenditures for food, clothing, etc., with various incomes. FORMS FOR ACCOUNTS: explanatory notes and year's blanks for household expenses, daily household notes, expenditures for husband, personal (wife's) expenses.

CHAPTER IX

MARRIED SEXUAL LIFE

General ignorance, male, female; mother's teachings generally useless or worse. MARRIAGE RELATION: reproductive organs; judgment and consideration necessary. PHYSIOLOGY OF CONCEPTION: fertilization; spermatozoa and ovum must unite; avoidance of conception; various methods generally useless, often harmful; abortion, always dangerous, often fatal, not described. PREDETERMINATION OF SEX: rules for boy, girl, generally effective. BARRENNESS: causes in male discussed, physical defects, self abuse, nightly emissions, over indulgence, venereal diseases; causes in female discussed, physical inability, self abuse, unnatural intercourse, venereal diseases. CONCLUSION.

CHAPTER X

PREGNANCY AND CHILDBIRTH

General remarks. Not so dangerous as believed; statistics; danger principally to child. PREGNANCY: description of organs; size as compared with child; examination before marriage; signs of pregnancy; intercourse during pregnancy; sickness, necessary care and attention. CHILDBIRTH: physiology of childbirth; divided into three periods; precautions; care of

mother. HEREDITY: common errors; theory of heredity; just what is proven, not proven; inheritance of acquired characteristics; inheritance of disease; effect of environment; improvement of the race.

CHAPTER XI

BABIES

General remarks. PRELIMINARY PREPARATION: list of necessary clothing; other articles. GROWTH: table of weights at different ages; age to laugh, sit up, stand, be weaned, talk, etc. DUTIES OF NURSE: bathing; room, temperature, equipment and toys; clothing; crying; airing. TRAINING: attention necessary; sleeping; toys; bowels; bed wetting. FOOD: table of hours of feeding at various ages; mother's milk always best if mother is not sick; artificial milk, composition, how to make it, proportions as baby develops; second year; third year; weaning. SICKNESS: colic; constipation; contagious diseases; convulsions; croup; diarrhœa; fever; swallowing toys; vaccination; vomiting.

CHAPTER XII

CHILDREN

General remarks. General ignorance; joy of possessing children; necessity of study for proper raising. PHYSICAL GROWTH AND CARE: weight and height at various ages; eyes; ears; teeth; age for milk teeth, permanent ones; adenoids; catarrh; feet; food; exercise; tasks. MENTAL GROWTH AND CARE: various ages of development, savage, chivalrous, revolution, independent. TRAINING: control; home most important, others only adjuncts; amusements, schools; church; child labor.

CHAPTER XIII

SONS

General remarks. PHYSICAL Welfare; growth, lack of development; exercise necessary; violent athletics during growth an error, bad results of such; proper school during growth; food,

proper kind, alcohol. INTELLECTUAL WELFARE; proper studies during growth, manual training, account keeping, high school; college, age for sending, necessity, advantages of small college, large one, large universities; cost of college course at Yale, Illinois, West Point, Annapolis, Boston Tech, Leland Stanford, University of Texas, Valparaiso, Lawrenceville, Citadel; food at college. MORAL WELFARE; necessity for knowledge, sexual; puberty, symptoms, effects, care necessary; proper course for moral training, fear of results ineffective, effect on health; self-abuse, effects; nightly emissions, effects; venereal disease, preventives, kinds, symptoms, treatment; sexual intercourse not necessary, discussion; marriage, fitness, physical examination, qualities.

CHAPTER XIV

DAUGHTERS

General remarks. MORAL WELFARE; necessity for knowledge; puberty, signs, physiology of puberty; precautions, usual advice generally wrong; diseases, ordinary, venereal; chaperons. PHYSICAL WELFARE: physical development, exercise, food. INTELLECTUAL WELFARE: sensitive organism; school course; college, advisability, selection; cost of college course; marriage, advisability, suffragism.

CHAPTER 1.

FOOD

General Remarks. It is rather difficult to decide just what information to furnish in this chapter. Very few women know much about food values, calories, etc., and yet they get along very well. However, it is an undoubted fact that if all members of a family were fed on strictly hygienic principles, they would not feel weak, as they do quite often because of the lack of sufficient muscular or fat tissue, nor would they often have perverted tastes for certain improper foods, such tastes being induced by appetites improperly trained.

As a general rule, it may be said that the appetite should govern; but it is certainly necessary that some restrictions be placed on the appetite. For example, a growing child will have an abnormal appetite for candies and ice cream, yet too much of these are not at all good for him. If the appetite be only for such things, it is a developed appetite, and should be trained differently. A small amount of such foods is good for a growing child, but a desire for such things should be assuaged by proper foods, such as meat, bread, and potatoes. No child or laboring man is apt to eat too much of meat, bread, etc.; so it is safe to let them have all they want—but an office man should not eat too much of these things.

Finally, although I enter into some discussion of the food values, and show the calories in each article, too many meals should not be based solely on food values, unless the wife has systematically studied the subject. The great advantage of this chapter lies in the tables of articles, so that selection may be made for each meal without unnecessary trouble in deciding what to have.

FOOD VALUES

Classification. Food stuffs are divided into nutritive and non-nutritive constituents. The non-nutritive constituents are water, bones, fruit skins, etc. The water must not be confused with the water which is drunk. There is water in all food. It is considered non-nutritive, though of course it combines with the water drunk to make up the water of the body which is actually about

two thirds of the weight of the body. The portion of food which is eaten is called the "edible portion"; this excludes the non-nutritive constituents and includes the nutritive constituents and the water. Tables of constituents consider only the weight of the edible portion and show the amount of water and the amount of proteids, etc. in such edible portion.

The nutritive constituents are proteids, fats, carbohydrates, and ash. The ash helps principally in building up tissue, bones, and teeth. There is always enough ash in all foods, and the amount of it is so little, being only about 1 per cent in beefsteak, that special consideration is not given to it except in very careful diets.

Proteids. These are the tissue building constituents. They are found principally in meats, eggs, etc.

Fats. These are the heat producing constituents. They are found principally in meat and vegetables.

Carbohydrates. These are also principally heat producing constituents. They are found principally in the form of sugars in vegetables, nuts, fruits, and grains.

It must be remembered that proteids can produce heat, if there are not enough fats and carbohydrates; and fats and carbohydrates can take the place of a certain amount of proteids if necessary. However, in general, the amount of food units of each should be sufficient for the purposes.

Calories. A calorie is the unit of measure of heat. By definition it is exactly the amount of heat necessary to raise one kilogram of water through 1 degree Centigrade. In any food, it is the measure of the heat which would be obtained by actually burning the food to ashes, or the amount of heat which the body would obtain by consuming such food in the natural way, which is exactly the same thing.

The body uses up heat units from food in producing the heat of the body and the muscular energy of work such as walking, running, ploughing, digging, etc. It is roughly estimated that 80 per cent of the calories are used to heat the body and 20 per cent to do the muscular work. A laborer doing muscular work requires more heat units for his exposed body and more heat units for his muscular work.

TABLES

Units of Proteids, Fats and Carbohydrates Required. In order to complete this subject, it is necessary to furnish the number of units of each food constituent. Too much reliance should not be placed on these tables. As stated above, the appetite is the best guide. However, if the health is poor, and the appetite is good, it is safe to say that the proper number of calories is not present in the food eaten, or the proper proportion of proteids, fats, and carbohydrates is not used to make up the total of calories.

It is proven that a man at moderately hard work requires about 3,000 calories daily. Consequently, it would seem very simple to feed him nearly a pound of fat, which contains about 4,000 calories, and tell him to be content. But he would not eat it in the first place; and if he did eat it, he would not be in good health in the second place. There are no experiments to prove exactly what would happen to a man who lived consistently on a pound of fat each day, but it is probable that he would first lose all the muscular tissue, then become flabby and useless, and die.

It is evident that there must be some proper proportions of the three constituents, proteids, fats, and carbohydrates. There are no exact figures available to prove exactly what are the proper proportions of each; but exact figures have been compiled showing what are the exact proportions of each eaten by various persons who were and remained in very good health. These figures seem to be good enough for all purposes, and are consequently adopted. To simplify the discussion, carbohydrates and fats are combined under the one item of "fats". This is not strictly correct, but is good enough for all practical purposes.

A man at hard muscular work will require proportionally more proteids (tissue building units) than an office man; a growing child will require more proteids than one of equal size already grown. A woman generally requires less proteids than a man, being smaller and doing less muscular work. The following table shows the relative percentages as compiled in textbooks on the subject:

	Proteids	Fats
Man, ordinary work	16%	84%
Man, hard work	19%	81%
Man, old age	17%	83%

The above figures show that, although there is some difference, an average diet containing about 18 per cent of proteids, and 82 per cent of fats will be suitable for all persons. The appetite will control; the working man will naturally eat more proteids.

Number of Calories Required. The usual method of textbooks in determining the necessary amount of calories is based on the weight of the individual. For example, a man weighing 200 pounds requires more calories than one weighing 120 pounds. I prefer the not so usual method of determining by the height of the individual the necessary amount of calories. This is a little simpler and a little more suitable. For example, a man weighing 200 pounds is generally taller than one weighing 120 pounds, and requires more calories: if of the same height, the fat man has been eating too many calories and should eat less, the thin man has been eating too few calories and should eat more. Also, a man should not have more food than a thin growing boy of the same height; nor should a woman of sedentary habits have less food than a man of the same height who actually performs no more muscular labor. The error in the present customary system of feeding lies in the fact that persons of sedentary habits, women especially, eat at the same table and eat as much as one who performs more or less hard muscular labor. The average farmer's wife performs muscular labor, generally too much, and is not fat.

The following table shows approximately the necessary number of calories for persons as stated:

2′ 9″ (Baby, 2½ years)	1400 calories
4′ 4″ (Child, 10 years)	2000 "
5′ 4″ (Girl, Boy, Man, Woman)	2500 "
5′ 8″ (Man, Woman)	3000 "

For special cases of muscular work, we use

5′ 4″ (Man, etc., ordinary work)	3000 calories
5′ 4″ (Man, etc., hard work)	4000 "
5′ 8″ (Man, etc., ordinary work)	3500 "
5′ 8″ (Man, etc., hard work)	5000 "

These figures are very close, for we find the following were the actual diets of men in good health:

Tailors (ordinary work)	3053 calories
Swedish workman (ordinary labor)	3436 "
Swedish workman (hard labor)	4726 "

United States Army Ration (peace time) ..... 3851 Calories
Football players (hard work) ..... 5742 "

Calculations to Obtain Calories. If it is desired to go so greatly into detail as to learn the exact constituents of food to be furnished, or if it is evident that the food being furnished does not supply the proper amount of proteids, fats, and calories for health, it is necessary to make calculations in order to see what is the trouble and how it can be remedied. If the results are fairly close to the theoretical requirements, it is safe to say that it should be left alone.

However, having decided what is the proper number of Calories required, and remembering that the proportions should be 18 per cent proteids and 82 per cent fats, the calculation is very simple.

For very exact calculations, the following table gives the number of calories in quantities by weight of proteids, fats, and carbohydrates.

	Calories per		
	pound	ounce	gram
Proteids contain	1,815	114	4.1
Fats contain	4,040	252	9.3
Carbohydrates contain	1,818	114	4.1

It is not however generally necessary to calculate the calories by the pound, ounce, or gram (though there are tables for that purpose), because suitable tables are now prepared so that the calories of the constituents are calculated for the average helping of each article; thus the following table shows constituents and calories in 1 slice of beef, 1 pork chop, 1 cutlet, 1 glass milk, etc.

The following table shows average helpings taken from Locke's *Food Values*, price $1.25. Only a few articles of each are listed here; but all articles can be found in this book. Articles very similar to these listed can be roughly estimated as having the same number of proteids, fats, and calories.

Food Stuffs	Average Quantity	Calories			Time to digest	
		Proteids	Fats	Total	Hrs	Min.
Roast beef	1 slice	91	266	357	3	00
Roast chicken	1 slice	132	49	181	2	30
Lamb chop (and bone)	1 chop	89	278	367	3	00
Mutton chop	1 chop	93	42	135	3	00
Bacon	1 slice	13	181	194	3	00
Ham	1 slice	32	108	140	4	30
Sausage	1	19	145	164	3	20
Fish (trout)	1 piece	43	14	57	3	00
Soup (bean)	4 oz	16	62	78	1	00
Butter	1 ball	1	118	119	3	00
Cream	1 tbsp	3	51	54	3	00
Milk, skimmed	1 glass	32	52	84	2	00
Milk, unskimmed	1 glass	30	127	157	2	00
Buttermilk	1 glass	27	53	80	2	00
Cheese, Swiss	1 slice	23	66	89	3	30
Egg	1	27	56	83	3	00
Beans, baked	3 h tbsp	44	254	298	3	30
Beans, string	4 oz	2	11	13	2	00
Potato, sweet	1	12	192	204	3	00
Potato, irish	1	16	133	149	3	30
Apple	1	2	70	72	2	00
Orange	1	6	90	96	1	30
Banana	1	7	120	127	1	30
Watermelon	1 slice	2	37	39	1	00
Prunes	10	15	510	525	2	30
Bread, brown bakers	1 slice	18	168	186	3	30
Bread, white bakers	1 slice	11	69	80	3	30
Crackers, saltines	1	1	12	13	3	00
Crackers, Uneeda Biscuit	1	2	23	25	3	00
Oatmeal	2 h tbsp	36	165	201	2	30
Force	5 h tbsp	7	59	66	2	30
Grapenuts	5 h tbsp	32	215	247	2	30
Shredded wheat	1 biscuit	13	96	109	2	30
Cake, frosted	1 slice	10	139	149	3	00
Pie, apple	1/6 pie	16	336	352	3	30
Pie, mince	1/6 pie	27	306	333	3	30
Pudding, bread	2 h tbsp	23	202	225	3	00
Pudding, chocolate	2 h tbsp	21	187	208	3	00
Ice Cream, vanilla	2 h tbsp	21	168	189	3	00
Honey	1 tbsp	..	101	101	1	00
Syrup, maple	1 tbsp	..	88	88	1	30
Sugar, cube	1 cube	..	29	29	1	00
Sugar, granulated	1 h tbsp	..	41	41	1	00
Cocoa	1 cup	37	242	279	1	00
Coffee or Tea	1 cup	11	145	156	1	00
Lemonade, plain	1 glass	..	174	174	1	00
Mellin's Food	1 cup	31	144	175		
Malted Milk	1 cup	40	181	221		
Whiskey, American	1/12 glass	(Constituents vary)		150		
Brandy	1/12 glass	"	"	300		
Wine, American	1/2 glass	"	"	90		
Port	1/8 glass	"	"	50		
Champagne	1/2 glass	"	"	125		
Cider	1 glass	"	"	45		
Beer, American	1 glass	"	"	120		

The following table shows method of using the preceding table in order to learn the calories and the percentages by weight of an ordinary meal. Take a meal of bean soup, roast beef, boiled potato, string beans, white bread, butter, milk, chocolate pudding, whipped cream. All of these articles are listed in the table

except that the whipped cream is to be placed on the chocolate pudding and the quantity should be 1 h tbsp instead of 1 tbsp as given in the table. The following are the calculated values:

Food	Calories		
Article	Proteids	Fats	Total
Bean soup	16	62	78
Roast beef	91	266	357
Boiled potato	16	133	149
String beans	2	11	13
White bread	11	69	80
Butter	1	118	119
Milk, unskimmed	30	127	157
Chocolate pudding	21	187	208
Whipped cream	6	75	81
Total	194	1048	1242
Percentages	16%	84%	100%

This is a fairly well balanced meal. It has the proper amount of calories, which is the main point. It has about the right percentage of proteids, which is advisable for general results, and the fats are more than sufficient to furnish the necessary heat energy for the body. More exact and theoretically correct proportions could have been obtained by substituting prunes for potato and string beans, but it is doubtful if the appetite would have been satisfied or if the person would have eaten them at all. As the appetite is more important, except when the results show that something is evidently wrong with the food, it is safe to say that the above meal will be very suitable.

TABLES OF MEALS

The following tables will be useful principally in furnishing items for decision as to what shall be placed on the table. However, though the exact proportions have not been worked out in each case, the tables form a good basis by which meals can be supplied in proper proportion of each constituent.

Three meals for Baby to and one-half years of age (1310 calories)

BREAKFAST	LUNCH	DINNER	SUPPER
Oatmeal or Hominy	Glass Milk	Soup (½ cup)	Bread (2)
Glass Warm Milk	Cracker (2)	1 Chop	Milk
Boiled Egg		1 Baked Potato	
1 Slice Bread		2 tbsp Peas	
		1 Baked Apple	

Three meals for Child ten years of age (1993 calories)

BREAKFAST	LUNCH	DINNER
Toast	Bacon	Beef Soup
2 Boiled Eggs	Baked Potato	Fried Potatoes
Glass Milk	Bread	Roast Beef
	Glass Milk	Apple Pie
	Butter	

Three meals for Boy or Girl 15 years of age (2470 calories)

BREAKFAST	LUNCH	DINNER
Apple	Bacon (2)	Beef Soup
Oatmeal	Baked Potato	Spaghetti
Toast	Bread, Butter	Fried Potatoes
2 Boiled Eggs	Butter	Roast Beef
Glass Milk	Tea	Apple Pie

Three meals for Man with office work (2963 calories)

BREAKFAST	LUNCH	DINNER
Apple	Chicken Sandwich	Beef Soup
Bacon (2)	Ham Sandwich	Spaghetti
Oatmeal	Tea	Fried Potatoes
Toast	Apple Pie	Roast Beef
2 Eggs		Chocolate Pudding
Glass Milk		Whipped Cream
		Coffee

Three meals for Laborer (3982 calories)

BREAKFAST	LUNCH	DINNER
Ham (2)	Apple	Beef Soup
Bread	2 Ham Sandwiches	Spaghetti
2 Eggs	Tea	Fried Potatoes
Coffee	Apple Pie	Roast Beef (2)
Grape Nuts		Bread Pudding (2)
Milk		Bread
		Butter
		Coffee

In making out a table of three meals a day, for a farmer or day laborer for a week in January, April, July, and October, I have used as a basis the ration in the United States Army, which contains about 3,800 calories. This ration is more than sufficient for a day's work of ordinary labor, for it is known that a soldier always gets fat in camp or in field with this ration. It is also known that it is not a great deal too much, for the soldier gets thin when in marches his ration is cut down to a somewhat smaller quantity so that several days' supply of it can be carried.

The ration (one day's supply) as furnished to the U. S. soldier is as follows:

Meat, various	20	oz
Bread	18	"
Beans	2.4	"
Potatoes	20	"
Prunes	1.28	"
Coffee	1.12	"
Sugar	3.2	"
Milk	.5	"
Vinegar	.16	"
Salt	.64	"
Pepper	.04	"
Cinnamon	.014	"
Lard	.64	"
Butter	.5	"
Sirup	.32	"
Lemon Extract	.014	"

There are various substitutions, such as tomatoes for potatoes, apples for prunes, etc., which may be made in above ration. This food costs about $8.00 a month, and is about as cheap as any strong man can expect to obtain his month's food supply.

With this as a basis, and using food in season, the following table gives a week's list of meals for the four seasons of the year. It is possible to make a similar table for a man with office work, by simply changing the breakfast, substituting some breakfast food and other light food, lightening the dinner (making it a lunch) but keeping the supper about the same. This cuts down the calories, which is as it should be. If the day laborer takes his lunch to work with him, the lunch should be made less and the supper much greater.

Meals for one week for a Farmer or Day Laborer in January

MORNING	NOON	NIGHT
Fried Corn Meal Mush and Syrup Beef Hash Coffee	Bean Soup Mashed Potatoes Pot Roast and Gravy Apple Pie Coffee	Boiled Rice Curry of Beef Stewed Prunes Hot Tea
Oatmeal and Milk French Fried Potatoes Hamburg Steak, Brown Gravy Coffee	Beef Soup Boiled Potatoes Boiled Beef and Dumplings Rice Pudding Coffee	Hashed Potatoes Sliced Onions Beef Fritters Jam, Bread Coffee
Milk Toast Lyonnaise Potatoes Liver and Bacon Coffee	Vegetable Soup Browned Potatoes Beef à la Mode Bread Pudding Coffee	Stewed Tomatoes Chili con Carne with Mexican Beans Cinnamon Buns and and Butter Hot Tea
Hot Cakes and Syrup Braised Beef Coffee	Cream of Tomato Creamed Potatoes, Cold Slaw Boiled Fish Lemon Meringue Pie Coffee	Rice Fritters Beef Rolls, Brown Gravy Bread, Butter Coffee
Hot Biscuits and Butter Boiled Potatoes in Jackets Boiled Salt Mackerel Coffee	Fish Chowder Soup German Boiled Potatoes Soft Roast Beef and Gravy Tapioca Pudding Coffee	Green Onions Irish Stew with Dumplings Parkerhouse Rolls, Peach Sauce Hot Tea
Cream of Wheat with Milk Cottage Fried Potatoes Beefsteak and Gravy Cocoa	Vermicelli Soup Baked Beans, Piccalilli Salad Fried Bacon Plum Duff with Sauce Coffee	Bean Salad Macaroni and Cheese Boiled Rice and Milk Coffee
Corn Meal Mush and Milk	Split Pea Soup Mashed Potatoes,	Stewed Dried Corn, Chili Sauce

MORNING	NOON	NIGHT
Baked Potatoes	Mashed Turnips	Codfish Cakes
Beef Loaf and Gravy	Roast Beef and Gravy	Currant Buns and Butter
Coffee	Mince Pie	Hot Tea
	Coffee	

Meals for one week for a Farmer or Day Laborer in April

MORNING	NOON	NIGHT
Bread and Syrup	Potato Soup	Browned Potatoes
German Fried Potatoes	Boiled Sauerkraut	Tamales and Brown Gravy
Bacon and Eggs	Boiled Potatoes in Jackets	Orange Gelatin
Coffee	Boiled Corned Beef	Coffee
	Spiced Muffins, Caramel Sauce	
	Iced Tea	
Fresh Fruit	Baked Dried Peas	Potato Cake
Beef Potpie	Candied Sweet Potatoes	Beef, Spanish
Coffee	Hot Slaw	Stewed Prunes, Jenny Linds
	Roast Pork	Hot Tea
	Apple Sauce	
	Ice Cream, Cake	
	Coffee	
Fine Hominy and Milk	Purée of Brown Peas	Beef Stew
Browned Potatoes	Creamed Potatoes	Biscuits and Butter
Pork Chops and Gravy	Mashed Turnips	Coffee
Coffee	Creamed Codfish	
	Baked Apples with Sauce	
	Coffee	
Stewed Fruit	Barley Soup	Tomato Sauce
French Fried Potatoes	Stewed Lima Beans	Salmon Cakes
Ham Omelet	Roast Beef, Gravy	Spaghetti and Cheese
Coffee	Yorkshire Pudding	Cocoa
	Peach Rolls and Sauce	
	Coffee	
French Toast and Butter	Tomato Soup	Cheesed Potatoes
Corned Beef Hash	Mashed Potatoes	Beefsteak and Onions
Coffee	Boiled Beef	Stewed Apples
	Corn Starch Pudding with Shredded Cocoanut	Coffee
	Iced Tea	

MORNING	NOON	NIGHT
Shredded Wheat and Milk German Boiled Potatoes and Gravy Cocoa	Boiled Cabbage Boiled Potatoes Boiled Bacon Cottage Pudding Coffee	Boiled Rice and Milk Chop Suey Hash Jam, Sugar Buns Hot Tea
Buckwheat Cakes and Butter Onion Gravy Fried Bacon Coffee	Cream of Tomato French Fried Potatoes Fried Fish Apple Tarts and Sauce Coffee	Boiled Rice Piccalilli Turkish Beef Ginger Bread Iced Tea

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Meals for one week for a Farmer or Day Laborer in July

MORNING	NOON	NIGHT
Hot Biscuits and Butter Boiled Potatoes in Jackets Boiled Salt Mackerel Coffee	Potato Chowder Baked Parsnips Pot Roast Beef, Gravy Prune Pie Coffee	Baked Potatoes Beef Loaf, Tomato Sauce Cinnamon Buns Cocoa
Stewed Prunes French Fried Potatoes Mutton Potpie Coffee	Rice and Tomato Soup Boiled Potatoes in Jackets Roast Ribs of Beef, Dressing, Gravy Fruit Rolls, Lemon Sauce Coffee	Potato Salad Cold Tomatoes Beef Cheese Bread and Butter Coffee
Corn Muffins and Syrup Hash Browned Potatoes Beefsteak Smothered with Onions Coffee	Baked Beans Sliced Onions, Chili Sauce Boiled Bacon Corn Bread and Syrup Coffee	Stewed Navy Beans Chili Sauce Codfish Cakes Coffee Cake and Butter Coffee
Milk Toast Browned Potatoes Vienna Sausage Coffee	Spaghetti Soup Boiled Cabbage Boiled Potatoes Corned Beef Rice Pudding, Caramel Sauce Coffee	Lyonnaise Potatoes Curry of Beef with Rice Corn Muffins and Syrup Iced Tea

MORNING	NOON	NIGHT
Peach Sauce Naked Potatoes Braised Beef Coffee	Purée of Lima Beans Mashed Turnips Beef à la Mode Bread Pudding Iced Tea	German Boiled Potatoes Stewed Chipped Beef, with Cream Sauce, on Toast Apple Pie Iced Tea
Batter Cakes and Syrup Beef Hash Cocoa	Vegetable Soup Browned Potatoes Baked Dried Peas Roast Mutton, Mint Sauce Coffee	Lyonnaise Potatoes Beef Fritters, Brown Gravy Prune Butter, Bread Cocoa
Oatmeal and Milk Irish Stew Coffee	Clam Chowder Stewed Chili Beans, Cold Slaw Soft Roast Beef, Gravy Spiced Muffins Coffee	Sliced Onions Potato Salad Cold Boiled Ham Tea Buns and Butter Iced Tea

Meals for one week for a Farmer or Day Laborer in October

MORNING	NOON	NIGHT
Stewed Peaches French Fried Potatoes Cheese Omelet Coffee	Cream of Tomato Spinach Greens Boiled Potatoes in Jackets Vienna Sausage Vanilla Ice Cream Coffee	Beef Hash Apple Sauce Biscuits Hot Tea
Cream of Wheat with Milk Naked Potatoes Beef Loaf and Gravy Coffee	Purée of Tomato Mashed Turnips Stewed Tomatoes Roast Beef, Gravy Yorkshire Pudding Cocoa Meringue Iced Tea	Stewed Kidney Beans Cucumber Pickles Tamales with Gravy Raspberry Gelatin Coffee
Grape Nuts Hash Browned Potatoes, Fried Onions	Cream of Celery Stewed Lima Beans Lettuce Salad	Macaroni and Cheese Chili con Carne Jam Sandwich Buns

MORNING	NOON	NIGHT
Beefsteak Coffee	Boiled Corned Beef Lemon Sauce Caramelized Coffee	Hot Tea
Strawberry Jelly Potato Cakes Beef Roll and Gravy Coffee	Mashed Potatoes Succotash Pickles Soft Roast and Gravy Tapioca Pudding Fruit Coffee	Potato Cake Beef Roll, Brown Gravy Strawberry Gelatin Iced Tea
Fried Mush and Syrup Fried Liver and Bacon Coffee	Macaroni Soup Creamed Potatoes Dried Stewed Corn Sliced Tomatoes Boiled Fish and Cream Sauce Cocoanut Pie Iced Tea	German Fried Potatoes Welsh Rarebit on Toast Cinnamon Rolls and Butter Coffee
Corn Meal Mush and Milk Baked Potatoes Fried Sausages and Gravy Coffee	Baked Beans Green Onions Bacon Corn Bread and Syrup Coffee	Oatmeal Fritters Beef and Potato Potpie Stewed Peaches Coffee
Milk Toast German Boiled Potatoes Beefsteak Potpie Cocoa	Purée of Split Peas Browned Potatoes Beet Salad Pot Roast Prune Rolls, Tart Sauce Coffee	Succotash Tomato Sauce Beef Croquettes Corn Muffins and Butter Cocoa

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In making out a similar table of three meals a day for an office man for a week in January, April, July, and October, I have practically copied the meals from Mrs. Rorer's *Every Day Menu Book*, which contains meals for every day in the year. It is evident that some of the articles have special names, the cooking of which is described in her cookbook. It is also evident that these meals will cost more than those listed for a day laborer. The author states that they "should not cost over ten dollars per week

for a family of six". Those for a day laborer should cost less than seven dollars per week for a family of six.

It will be noted in these tables that certain leftover foods are again used in other forms.

Meals for one week for Office Man in January

	MORNING	NOON	EVENING
SUNDAY	Oranges Omelet Muffins Coffee	Clear Soup Celery Roast Beef, Brown Sauce Mashed Potatoes Spinach Pudding Coffee	Sardines Toast Jelly Graham Wafers
MONDAY	Baked Apples Granose Minced Beef Toast Coffee	Cold Beef Cold tomato Sauce Brown Bread Tea	Beef Soup Nut Rolls, Sauce Hollandaise Creamed Cabbage Celery Salad Toast Cheese Coffee
TUESDAY	Oranges Oatmeal, Cream Pork Chops Stewed Potatoes Toast Coffee	Scalloped Oysters Rolls Cabbage Salad Graham Wafers Coffee	Bean Soup (beef bones) Boiled Leg of Mutton, Caper Sauce Rice Turnips Lettuce Salad Wafers, Cheese Apple Dowdy Coffee
WEDNESDAY	Baked Apples Cream Omelet Muffins Coffee	Cream of Potato Soup Croutons Hash of Mutton, Tomato Sauce Canned Fruit Wafers	Cream of Turnip Soup (mutton stock) Roasted Duck, Nut Stuffing Stewed Celery Cabbage Salad Wafers, Cheese Bakewell Pudding Coffee

	MORNING	NOON	NIGHT
THURSDAY	Chopped Dates in Hot Wheatlet Cream Hashed Duck Toast Coffee	Macaroni, Sauce Bechamel Milk Biscuits Farmhouse Apples	Sago Soup Shepherd's Pie (cold mutton) Sauce Bechamel Peas Celery Mayonnaise Wafers, Cream Cheese Batter Pudding Coffee
FRIDAY	Oranges Hominy Grits, Milk Egg Brouilli Toast Coffee	Fried Oysters, Cabbage Salad Coffee Stuffed Dates	Soup Maigre Creamed Spaghetti Boiled Cod, Sauce Hollandaise Potato Balls Mock Artichokes Cabbage or Lettuce Salad Wafers, Cheese Coffee
SATURDAY	Baked Apples Oatmeal, Milk Chipped Beef Rice Muffins Coffee	Fish Cutlets, White Sauce Milk Biscuits Gingerbread Coffee	Giblet Soup Broiled Steak, Parsley Sauce Hashed Brown Potatoes Canned Corn Celery Salad Wafers, Cheese German Compote of Apples

Meals for one week for Office Man in April

	MORNING	NOON	EVENING
SUNDAY	Fruit Poached Eggs on Toast Coffee Whipped Cream	Consommé à la Duchesse Fricandeau of Veal, Brown Sauce Baked Macaroni Scalloped Tomatoes Cold Asparagus, French Dressing Strawberry Ice Cream Lady Fingers Coffee	Creamed Sweet Breads with Mushrooms Bread Butter Lemon Jelly Lady Fingers

	MORNING	NOON	NIGHT
MONDAY	Fruit Oatmeal, Milk Minced Veal on Toast Coffee	Potato Pudding with Chopped Veal Filling, Cream Sauce Whipped Cream Wafers Tea	Cream of Corn Soup (canned corn) Broiled Chops Creamed Potatoes Peas Cabbage Salad Toasted Crackers, Cheese Coffee
TUESDAY	Strawberries Oatmeal, Milk Broiled Bacon Toast Coffee	Veal Croquettes Mayonnaise of Celery Bread Butter Cocoa, Whipped Cream	Clear Soup with Tomato Blocks Panned Chicken, Cream Sauce Boiled Rice Asparagus Parson's Sponge
WEDNESDAY	Steamed Figs Granose, Cream Eggs Toast Coffee	Stewed Giblets Boiled Rice Bread Butter Tea	Cream of Tomato Soup Croutons Beefsteak Rolls, Brown Sauce Italian Potato Croquettes New Beets (canned) Cress Salad Toasted Crackers, Cheese Poorman's Tartlets
THURSDAY	Oranges Broiled Lamb Chops Toast Coffee	Hot Apples and Rice, Cream Gluten Muffins Tea	Cream of Pea Soup (canned peas) Larded and Braised Calf's Liver, Brown Sauce Boiled Rice Stewed New Carrots Cold Asparagus, French Dressing Baked Bananas Ginger Wafers

	MORNING	NOON	NIGHT
FRIDAY	Oatmeal, Milk Broiled Salt Mackerel Corn Bread Coffee	Baked Beans with Tomato Sauce Brown Bread Coffee	Cream of Clam Soup Cabbage Stuffed with Rice and Lentils, Cream Sauce Scalloped Tomatoes Cold Asparagus, French Dressing Chocolate Sponge
SATURDAY	Bananas Hominy Grits, Cream Toast Coffee	Minced Calf's Liver on Toast Tomato Sauce Strawberries	German Flour Gruel Broiled Steak French Fried Potatoes Asparagus on Toast Rice Jelly

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Meals for one week for Office Man in July

	MORNING	NOON	EVENING
SUNDAY	Fruit Fried Egg Plant Whole Wheat Muffins Coffee	Clear Soup with Macaroni Roast Chicken, Brown Sauce Sour Grape Jelly Potatoes, Brown Baked Stewed Corn Tomato Salad Toasted Crackers, Cheese Ice Cream, Macaroons Coffee	Veal Croquettes Mayonnaise of Tomatoes Bread and Butter Sandwiches Coffee, Whipped Cream
MONDAY	Huckleberries Wheatlet, Cream Corn Oysters Muffins Coffee	Hot Corn Pudding Whole Wheat Bread Butter Iced Tea	Corn Chowder Chicken Pie or (cold chicken) Cream Sauce Tomato Salad, Wafers Watermelon
TUESDAY	Blackberry Flummery, Cream Toast Coffee	Huckleberry Slump, Cream	Mock Bisque Hamburg Steaks, Brown Sauce New Potatoes Lima Beans Corn on Cob Lettuce Salad, Wafers Coffee

	Morning	Noon	Night
Wednesday	Berries, Cream Crisp Rolls Coffee	Corn Pudding Milk Biscuits Fruit	Clear Soup Stuffed Egg Plant, Sauce Hollandaise Macaroni with Tomato Sauce String Beans Salad Watermelon
Thursday	Huckleberries Oatmeal, Milk Toast Coffee	Omelet with Green Peas Rice Muffins Fruit	German Gruel Soup Broiled Chops Creamed Potatoes Succotash Cabbage Salad, English Dressing Wafers, Cheese Ceylon Pudding
Friday	Fruit Broiled Tomatoes Corn Bread Coffee	Corn Fritters Hot Brown Bread Cantaloupe	Vegetable Bouillon Croutons Planked Fish, Potato Roses Sliced Cucumbers, French Dressing Lima Beans Salad Toasted Cheese Fingers Coffee
Saturday	Granose, Fruit Juice Fried Egg Plant Tomatoes Coffee	Smothered Beef Corn Pudding Fruit	Panned Whole Chicken, Brown Sauce Boiled Tomatoes Rice Macedoine on Lettuce, French Dressing Toasted Cheese Fingers Chilled Watermelon

Meals for one week for Office Man in October

	Morning	Noon	Evening
Sunday	Fruit Barley Flakes, Milk Mutton Mince on Toast Coffee	Consummé with German Farina Blocks Roasted Guinea Fowl Broiled Bacon Currant Jelly Hominy Stewed Celery	Nut and Fruit Sandwiches Cocoa

	Morning	Noon	Night
		Orange Jelly, Wafers Peach Ice Cream Macaroons Coffee	
Monday	Baked Apples Oatmeal, Milk Omelet Toast Coffee	Cream of Celery Soup Whole Wheat Bread	Consommé with Rice Broiled Steak, Stuffed Potatoes String Beans Cabbage Salad, English Dressing Wafers, Cheese Cottage Gems, Jelly Sauce
Tuesday	Stewed Pears Granose, Cream Gems Coffee	Panned Oysters Rolls Celery Salad	Consommé with Almond Balls Veal Cutlets, Tomato Sauce Rice Croquettes Young Lima Beans Lettuce Salad Wafers, Neufchatel Cheese Dutch Apple Cake
Wednesday	Warm Apple Sauce with Granose, Cream Whole Wheat Bread Coffee	Macaroni Rarebit Toast Coffee	Tomato Soup, Croutons Cannelon, Purée of Peppers Potato Fritters A Simple Salad Wafers, Cheese Farina Jelly
Thursday	Hot Baked Sliced Bananas, Cream Muffins Coffee	Omelet with Green Peas Oatmeal Gems Cocoa	English Beef Soup (bits from cannelon) Broiled Pork Chops Creamed Potatoes String Beans Cabbage Salad, Farmer's Dressing Wafers Apple Roly Poly, Hard Sauce

	MORNING	NOON	NIGHT
FRIDAY	Codfish Balls, Tomato Sauce Corn Muffins Coffee	Baked Farina Tomatoes Sliced Whole Wheat Bread Grapes	Oyster Cocktails Boiled Flounder Sauce Hollandaise Potato Balls Beetroot Salad, Cheese Fingers Coffee
SATURDAY	Baked Apples Mush Bread Coffee	Fried Oysters Cabbage Salad Cornmeal Sally Lunn Coffee	Consummé with Egg Balls Broiled Steak Mashed Sweet Potatoes Buttered Beets Olive Salad, Toast Fingers Whipped Cream with Chopped Nuts

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Tables of More Elaborate Dinners for Thanksgiving and Christmas.

THANKSGIVING DINNER

Oyster Soup and Crackers		Oyster Soup
Roast Turkey and Dressing		Celery, Olives
Cranberry Sauce		Roasted Turkey, Giblet Sauce
Green Peas		Cranberry Jelly
Roast Pork and Gravy		Sweet Potato Croquettes
Apple Sauce		Creamed Onions
Mashed Potatoes	OR	Oyster Pie
Bread and Butter		Waldorf Salad, Water Thins
Apple Pie		Mince Pie
Jelly Roll and Marble Cake		Crackers, Cheese
Mixed Candies		Coffee
Assorted Nuts		
Ice Cream		
Coffee, Cream		

CHRISTMAS DINNER

Oyster Soup and Crackers		Cream of Corn Soup
Roast Chicken with Dressing		Chicken Pie
Cranberry Sauce		Roasted Beef, Brown Sauce
Boiled Ham and Mashed Potatoes		Baked Sweet Potatoes
Green Peas		Spinach
Celery		Celery
Bread and Butter	OR	Bread and Butter
Peach pie		Plum Pudding, Hard Sauce

Jelly Roll	Nuts, Bonbons, Raisins
Mixed Candies and Nuts	Toasted Crackers, Cheese
Crushed Fruit and Cream	Coffee
Coffee	

For more detailed information and tables of meals, see *Every Day Menu Book,* Mrs. Rorer, price $1.50; *Boston Cooking School Magazine,* price 10c, $1.00 per year, which has a week's menu in each month's issue; *Woman's Home Companion,* price 15c, $1.50 per year, which has a month's menu in each month's issue.

HOW TO DETECT FOOD WHICH IS DISEASED; UNSOUND; OR UNWHOLESOME AND UNFIT FOR HUMAN FOOD

There is a remote possibility of rejecting wholesome food by following the rules below; but they are right in nearly every case. It is best not to take any risks; results are too serious; let others eat that food. Where the community has regular inspectors (which is unusual), they follow the rules below and make closer inspection than can be made by a housewife. If the food has been passed recently by an inspector, as shown by his stamp with date of inspection, such food may be safely eaten.

Animals: Good butcher's meat is firm and elastic to the touch; is bright red in color, except pork, veal, and lamb; is acid, turning blue litmus paper red; has a fresh but not decayed smell (to test this, run a rod into the center and smell it—the outside may have been deodorized). Meat decayed tears readily; the outside is pale, and even greenish in very bad cases; does not redden blue litmus paper. Meat of animals dying a natural death, or improperly killed, is dark, sometimes purple; full of red splotches. Meat of animals infected by disease does not show plainly or even at all the evidence of disease; such diseases are generally detected by examination of the whole animal by an expert inspector. If disease has been reported in the vicinity, it is obviously best to abstain from eating local meats. As all of the meats at large packing establishments are now properly inspected, such meat is generally free from disease; it can however be unsafe through decay. Thorough cooking of food helps materially to decrease danger from germs in diseased meat.

Poultry and Game: Tuberculosis is manifested by yellow lumps in lungs or liver; game is too "high" or too much decom-

posed when its odor is offensive (as a matter of fact, although often claimed to be healthy, there is some risk in eating game which is at all "high").

Fish: Fish out of season (unfit) is flabby, thin, and wasted; when boiled, looks bluish. Fresh fish is stiff, smells fresh, and has clean gills; old fish is very limp in the hand, has dirty gills, dull eyes, and smells rank.

Fruit and Vegetables: Unfit apples have black spots on outside, or worm holes; rotting oranges and pears are soft where rotting; potatoes should be pale, not streaked; asparagus should be firm and white; peas, beans and cabbages show evident signs of worms, if there are any; celery should be white and crisp.

Corn, Bread and Flour: Bunt, smut, and ergot are the diseases of grain. Before being ground, their presence is evident; after being ground, some spores may be seen with a microscope but detection by the average housewife is almost impossible. Good flour should not be lumpy, or moldy, or smell sour. To detect chalk, soapstone, and other adulterants, burn the flour; there should be very little ash; if much ash, there is much adulterant. Bad bread is sodden, sour (slightly sour may be all right) and mouldy.

Eggs: Fresh eggs, held to light, are most transparent at centre; old ones, at top; fresh eggs sink in water, old ones float below surface, rotten ones float at top.

Butter: Rancid (sour-smelling) butter is unfit for food.

Milk and Water: Submit sample to the Health Inspector; it is practically impossible to detect unfit milk and water, unless expert and provided with proper equipment.

For more detailed information see *The Food Inspector's Handbook,* Vacher, price $2.50; *Food Inspection,* Macewen, price $2.50.

FOOD IN SEASON

Foods are in season at slightly different times in various sections of the country. The following table shows approximately the times when foods are most easily obtained in good condition, fresh or after short storage:

SPRING	SUMMER	FALL	WINTER
Beef	Beef	Beef	Beef (best)
Mutton	Mutton	Mutton	Mutton (best)
Lamb	Young Ducks	Turkeys	Turkeys
Veal	Young Geese	Game	Old Ducks
Spring Chicken	Guineas	Oysters	Old Geese
Fish	Fish	Fish	Game
Early Lettuce	Lettuce	Lettuce	Oysters
Asparagus	Peas	Potatoes	Fish
Corn	String Beans	Celery	Celery
	New Potatoes	Cabbage	Old Lettuce
	Lima Beans	Tomatoes	Old Potatoes
	Beets	Old Corn	Old Cabbage
	Egg Plant	Onions	Old Onions
	Corn		Old Turnips
	Onions		Old Peas
	Tomatoes		

DIGESTION

Cooked food takes a little longer for digestion. The following table shows approximate times for digestion of many articles of cooked food.

1 HOUR	2 HOURS	3 HOURS	4 HOURS	5 HOURS	6 HOURS
Asparagus	Apples	Beans, lima	Beef	Cheese, milk	Bacon
Bananas	Apricots	Beets	Bread, brown	Duck	
Beer	Barley	Biscuit	Buckwheat	Pork	
Coffee	Beans, string	Bread, white	Cabbage	Suet	
Honey	Candy	Breakfast foods	Carrots		
Lemons	Cherries	Butter	Cheese, Swiss		
Melons	Dates	Cake	Corn, green		
Tea	Grapes	Celery	Liver		
Rice	Lettuce	Chicken	Lobster		
Sugar	Milk	Chocolate solid	Mackerel (salt)		
Yeast	Molasses	Codfish	Mutton		
	Olives	Cookies	Pie, Apple		
	Oranges	Corn Meal	Pie, Mince		
	Pears	Crackers	Sardines		
	Peas	Cream	Sausage		
	Plums	Eggs	Tongue		
	Pumpkin	Figs	Turkey		
	Strawberries	Fowl	Veal		

1 Hour	2 Hours	3 Hours	4 Hours	5 Hours	6 Hours
		Fish			
		Lamb			
		Macaroni			
		Nuts			
		Oatmeal			
		Oysters			
		Peaches			
		Pudding			
		Potatoes			
		Prunes			
		Quail			
		Rabbit			
		Rye Meal			
		Salmon			
		Shad Roe			
		Spinach			
		Trout			
		Wafers			
		Wheat Flour			

For more detailed information see *Food,* Alfred Andrews, price 75c.

STIMULANTS

Alcohol. Opinions are generally very much divided as to the effects of alcohol. It is a subject for much discussion, but prejudice has so much to do with it that those engaged in argument are seldom able to look calmly on the two sides of the question.

By reference to the table of food values, it is seen that alcohol is undoubtedly a food. One glass of beer contains 120 calories, 10 proteids, 48 fats, 62 alcohol; but by some peculiarity the alcohol calories cannot be stored in the body. They take the place at once of other calories, but cannot be stored for future use. A drink of American whiskey has about the same number of calories as a glass of unskimmed milk or a slice of ham. The objection to the use of alcohol as a food lies in the fact that alcohol dilates the surface blood vessels and causes the skin to give off heat faster than the stomach can absorb it. Consequently, although the skin feels hot, the actual total heat of the body is less. A person going out into the cold should not take alcohol; he will really be colder than if he let it alone. Alcohol does not build up tissue.

As a drug, alcohol has certain effects. It causes the heart to assume a temporary strength, it causes an excess of blood to go to the brain, (though very careful tests have shown that the acute-

ness of the brain is not thereby increased, many opinions to the contrary notwithstanding). If alcohol is taken in greater quantity than can be absorbed by the stomach, it first weakens the corpuscles of the blood, (gets them drunk; then paralyzes them as is evident by paralysis of the muscles in a drunken person; then finally in extreme cases paralyzes the brain centres which control the heart and lungs, resulting in death.

Tea and Coffee. A cup of tea or coffee has about as many calories as a glass of whiskey. Consequently they can be called foods.

As drugs, tea and coffee delay peptic digestion slightly, and should not be drunk at meals with much meat. Their action on the brain is different from alcohol in that they stimulate the nerves, producing wakefulness at night. In moderation, there are few bad effects from tea or coffee.

DIET

Diet actually means a careful selection of food. In other words, the wife should always diet the family. However, few families are careful in the selection of food until there is something wrong. Consequently, diet is generally understood to mean selection of food for the sick.

Diet for Sick Persons. This question should be left to a physician. The diet will vary with each case, though in general the diet must be some liquid such as milk, soup, beef tea, and broth. Contrary to prevalent ideas, food does not raise the temperature in a fever.

Diet for Fat and Thin Persons. Fat people eat too much "fat" food and at least enough "proteid" food; that is, the body does not use up all of the "fat" heat units. This may be due to too little exercise or too large a quantity of "fat" food. However, there are some persons who naturally require less "fat" food and consequently grow fat on less "fat" food than other persons of the same height. The rules are not different for such persons; they should eat less "fat" food. *Banting* (named after a man of the same name) consists in eating about half the calories normally consumed; and so selecting this food that about two-thirds of it will be proteids. This scheme will aid anyone, but is especially use-

ful for those who are naturally fat. There are many other schemes similar to Banting's, but the general idea is the same.

For a thin person to become fat, a scheme just the opposite of the above should be followed. There should be a little exercise (just enough to aid appetite), and the number of calories should be increased, especially fat.

The table below gives the number of "fat" units in the average helping of any article of food at a meal. From this, it is easy to see just what articles are fattening, and how to reduce or increase. This table shows that 1 piece of apple pie is as fattening as 8 mutton chops though about one-sixth as nourishing as one chop; one ball of butter is as fattening as two glasses of skimmed milk or 2 eggs.

Diet Table, Arranged in Order of Fats

Article	Average Helping	Fats	Proteids
Beans, string	4 oz	11	2
Crackers, saltines	1	12	1
Fish, trout	1 piece	14	43
Crackers, Uneeda Biscuit	1	23	2
Sugar, cube	1 cube	29	..
Watermelon	1 slice	37	2
Sugar, granulated	1 h tbsp	41	..
Mutton chop	1 chop	42	93
Roast chicken	1 slice	49	132
Cream	1 tbsp	51	3
Milk, skimmed	1 glass	52	32
Buttermilk	1 glass	53	27
Egg	1	56	27
Force	5 h tbsp	59	7
Soup (bean)	4 oz	62	16
Cheese, Swiss	1 slice	66	23
Bread, white baker's	1 slice	69	11
Apple	1	70	2
Syrup, maple	1 tbsp	88	..
Orange	1	90	6
Shredded Wheat	1 biscuit	96	13
Honey	1 h tbsp	101	..
Ham	1 slice	108	32
Butter	1 ball	118	1
Banana	1	120	7

Article	Average Helping	Fats	Proteids
Milk, unskimmed	1 glass	127	30
Potato, irish	1	133	16
Cake, frosted	1 slice	139	10
Mellin's Food	1 cup	144	31
Coffee or Tea	1 cup	145	11
Sausage	1	149	19
Oatmeal	2 h tbsp	165	36
Bread, brown baker's	1 slice	168	18
Ice Cream, vanilla	2 h tbsp	168	21
Lemonade, plain	1 glass	174	..
Malted Milk	1 cup	181	40
Bacon	1 slice	181	13
Pudding, chocolate	2 h tbsp	187	21
Potato, sweet	1	192	12
Pudding, bread	2 h tbsp	202	23
Grapenuts	5 h tbsp	215	32
Cocoa	1 cup	242	37
Beans, baked	3 h tbsp	254	44
Roast beef	1 slice	266	91
Lamb Chop (bone)	1 chop	278	89
Pie, mince	1/6 pie	306	27
Pie, apple	1/6 pie	336	16
Prunes	10	510	15

Diet for Brain Workers. Contrary to prevalent opinions, there is no special brain food. Recent experiments show this, conclusively. There are, however, certain considerations affecting the food for students and office men.

The brain must have extra supply of blood, and consequently there should be less blood required for the stomach. The first point then is that the foods must be easily and quickly digestible, so that less blood will be needed by the stomach. This is of far more importance than the relative quantity of proteids and fats. Pick out foods which are quickly digested; see the table of length of time to digest foods.

The second point is, that the reduction should be principally in fats; because these are the foods used up by muscular energy. They form an extra burden to brain workers, with their limited muscular work to use up these foods, and they only add to the work of the digestive organs. Consequently, they should be omitted.

Diet for Different Climates and Different Seasons of the Year. Except for the selection, from the preceding table, of the foods which are freshest during the varying seasons, there need be no special consideration given to the heating or cooling effects of the various foods. It is true that some foods produce more bodily heat than others, and would consequently form a proper diet in winter for savages, as is evident in Greenland where fats and oils are chief articles of diet; but the civilized human being eats practically the same food all of the year round, and overcomes the varying climatic temperatures by changes in quantity and material of his clothing.

CHAPTER II.

COOKING

General Remarks. There are many textbooks which give complete information on the subject of cooking. The only objection to them lies in the fact that they seldom have any distinguishing marks to show just what is the usual way and what is an unusual way of cooking. As a result, the wife has to try all the ways mentioned, and mark in the book the way which is most suitable.

Also, it is impossible for any one cookbook to have recipes which will exactly suit everybody. Each grown man has developed a taste for cooking similar to that of his youth, and this varies considerably. Briefly, it may be stated that the more careful has been the cooking in his youth, the less is the amount of grease or lard he wants directly in the food. For example, the negroes of the south and the mountaineers of the Appalachian regions are accustomed to a noisome mess of grease, made of flour and lard, in which it is hardly possible to see the few slices of beef or bacon. I am not sure that they actually prefer this style of cooking, but it is a fact that the greater the amount of grease directly in the food, the greater is the perverted taste of the man or the greater is the ignorance of the woman in cooking and other education.

EQUIPMENT

Kitchen. The following is a list of practically necessary articles in a kitchen. Some of them might possibly be dispensed with, but this is really a very small outfit. This outfit should preferably be increased. The kitchen cabinet listed below, seems unnecessary; but its value is understood after being used.

1 stove,
stove pipe, etc.
1 coal (wood) box
1 stove shovel
1 coal scuttle
1 ash can
1 garbage can
1 table, large
1 table, small
1 tea kettle
1 coffee pot
1 fry pan
1 sauce pan
1 muffin pan
3 pie plates
2 bread pans
2 cake pans
1 cake turner
1 bread knife
1 safety paring knife
1 butcher's knife
1 automatic knife grinder
1 cook's fork
1 cook's slicer
1 cleaver
or

2 chairs
1 sink mat
1 kitchen cabinet
1 refrigerator
1 scrubbing brush
1 floor mop
3 laundry irons, 1 handle
1 wash basin (if no waterworks)
1 alarm clock
1 preserving kettle
1 stove kettle
1 drip pan
1 rolling pin
1 nutmeg grater
1 flour sifter
1 egg beater
1 basting spoon
1 coffee mill
1 spring scale
1 thermometer
1 cook's assistant comprising the 7 articles above (small ones) $1.00
1 bread board
1 chopping bowl
1 dipper
1 cup
1 glass
1 dish pan
6 dish towels

A cork mat (called also cork linoleum) will materially soften the effects of much walking to and fro. This is practically a cork carpet and is quite expensive for a kitchen. It costs about $1.25 a square yard, making a complete carpet cost about $30.00. Next in value is linoleum; finally oid cloth, which is cheapest. If floor is of wood, do not paint it; for it must be scrubbed, and paint will be scrubbed off.

In order of cost, the above utensils grade as metal, gray enameled ware, blue (outside) and white (inside) enameled ware, aluminum, the last costing at least twice as much as the first. Many claim that the more expensive utensils are not nearly worth the increased cost.

The fumes of cooking can be partly carried away by a hood placed over the stove.

Disregarding all question of costs, it is thought that the other advantages lie:

1st, with the electricity because of the ease of manipulating, freedom from danger, complete control, absence of dirt and odor.

2nd, with the gas because of the ease of manipulating, complete control, absence of much dirt.

3rd, with the gasoline because of the ease of manipulating, control, absence of much dirt.

4th, the coal and wood have few advantages, but they are sometimes the only source. Their greatest disadvantages are the uncertainty of heat, the great quantity of dirt, and the labor of removing ashes.

All things considered, I believe that it is really more economical to use electricity, gas, or gasoline if the first cost of outfit is not more than twice that with coal or wood.

Comparison of Coal and Wood, Gasoline, Gas, and Electricity. The preceding table includes a stove complete without mentioning kind of stove. In many cases, it is impossible to use a gas or electric stove, because they cannot be obtained; but where they are available, their advantages should be carefully considered before deciding to use wood or coal.

Following list gives first cost of approximately equal size and capacity stoves, etc. using the different fuels. The electric appliances require no special wiring; just attach the plug and turn or the current. Electric appliances are new and expensive, but are rapidly decreasing in price.

	Coal and Wool	Gasoline, etc.	Gas	Electricity
Toaster				$ 3.50
Broiler				5.00
Chafing Dish		$10.00		15.00
1 hole cooker				10.00
2 hole cooker		6.00	$ 6.00	20.00
3 hole cooker		9.00	9.00	30.00
3 hole stove	$30.00		25.00	45.00
6 hole stove	40.00			
Laundry Iron		5.00		5.00

Following shows operating cost for cooking with a stove of about equal size for the same meals.

	Coal	Wood	Gasoline	Gas	Electricity
Cost per month	$4.00	$3.50	$10.40	$4.00	$6.50
Assumed cost for above calculation	3.25 per ton	4.00 per cord	.20 per gallon	.60 per 1000 cu ft	.10 per kilowatt

No information is available regarding operating cost of oil stoves, but it is probably a little less than that of gas stoves at 60 cents per 1000 cu. ft.

Dining Room. The following list includes the necessary articles for dining room:

1 rug 9'x12'
1 extension table
1 sideboard or
6 dinner plates
6 pie plates
6 butter dishes
6 table forks
6 tea spoons
6 table spoons

1 china cabinet, sometimes one piece
1 small table
3 salt shakers
3 pepper shakers
1 sugar bowl
1 glass pitcher
1 bread plate
1 cake dish
1 glass pickle dish
6 soup plates
(small)
1 glass butter dish (covered)
6 cups
6 glass tumblers
6 saucers
1 platter
1 vegetable dish, covered
1 vegetable dish, open
6 table knives
6 soup spoons
1 soup ladle
6 butter knives, small
1 butter knife, large
1 pickle fork
1 sugar spoon
1 sugar tongs
1 carving set, knife, fork (steel)

USES OF FOOD NOT EATEN

There are many economical and proper uses of food not eaten or not used in cooking. Only a few are mentioned here.

Stock: Use cracked bones, cold water; boil for three hours; skim; let cool. Will keep about four days; used in water for soups, adds flavor.

Meats: Make bones into stock; make meat into balls, hash, or hash on toast, pie, soups, and stews.

Eggs: Boil hard any left over soft boiled eggs, and use for garnishes; similarly, boil left over poached eggs for same purpose.

Butter: Use any unspoiled butter in cooking.

Potatoes: Make potato croquettes, potato puffs, potato custards, etc.

Cheese: Make cheese balls, cheese pudding.

Rice: Make muffins, croquettes, puddings.

Vegetables: Make soup or salad.

Fruits: Make soup or salad.

For more detailed information, see *Made Over Dishes*, Mrs. Rorer, price 50 cents.

GUEST BOX

Excepting lack of money, there is probably no greater source of trouble for a wife than unexpected guests. Very often, the husband or some other member of the family wishes to invite a guest to the house, and finds that this is impossible because the wife is not prepared. Naturally it is inferred that such a wife is not properly efficient, and this is at least a source of irritation.

There is no necessity for such difficulty; the wife can always be prepared. An unexpected guest does not expect an elaborate

entertainment. The wife should provide the following articles, which will be sufficient for five meals (from Saturday evening to Monday morning), and one of the meals can be prepared in ten minutes. This guest box should always be kept complete and undisturbed, otherwise, it will be of no value in an emergency.

Articles for Guest Box

10 cans peaches
10 cans pears
2 cans pineapples
breakfast food
2 lbs coffee
4 cans milk
1 jar olives
2 cans condensed soup
1 can roast beef
1 can tomatoes
1 can beans
1 can green peas
1 can plum pudding
2 boxes wafers
2 boxes crackers
2 small cans bacon
1 can chipped beef
1 can salmon
2 glasses jelly

RECIPES

In the recipes given below I have selected from the cookbooks such recipes as seem to me in most common use, and easiest to cook. For any except the most ordinary cooking, a book of recipes is an absolute necessity.

The recipes are copied almost verbatim from the hundreds of recipes in the Boston Cooking School cookbook. In many of them extra articles are used purely to give a very slightly improved taste to the food. Also, the method of preparing the food is given in great detail. Any sensible cook can quickly see just what are the essentials and what are merely refinements, and can omit the refinements when necessary. For example, the seasoning consists of very small articles, but cannot be omitted; yet the ingredients in vegetable soup may be reduced by one half, and the soup will still be very good.

Object of cooking: The object of cooking is to render food palatable, and to destroy germs. For the latter, heat is the prime requisite; many germs will live frozen in ice for days, but sufficient heat will kill all germs.

Cooking also softens the fibres of meat, softens and bursts the starch grains, hardens the albumen in eggs and meat.

Methods of cooking: Boiling is cooking in boiling water (boiling water is always the same temperature, regardless of force of boiling, being in fact the only exact temperature, which remains constant in cooking); stewing is cooking for a long time in hot

water (not boiling water); broiling is cooking over or in front of fire; roasting or baking is cooking in an oven; frying is cooking in a pan with fats such as lard, butter, etc.

MEAT

Extract: Cut meat, without fat, into small pieces; put in clean bottle; place in sauce pan of boiling water; cook until all juice is out of meat. This is especially good for the sick; one spoon of this is equal in nourishment to a plate of ordinary soup.

If weaker solution is desired; put water in this; or put meat originally in a varying amount of cold water and allow water to heat gradually.

To Retain Juices in the Meat: Put meat in boiling water, boil a few minutes, then lower the temperature.

Broiled Steak: Grease a wire broiler, place meat on broiler, turn every few seconds at first, turn occasionally until well cooked on both sides, should take out about five minutes; place on hot platter, spread with butter, sprinkle with salt and pepper.

Broiled Fillet of Beef: Cut slices about one inch thick, place in greased broiler, and broil five minutes. Serve with butter, sprinkle with salt and pepper.

Hamburg Steak: Chop finely lean raw beef, season with salt, pepper, and a few drops onion juice, shape like cakes, brown.

Roast Beef: Drip meat, rub with salt, dredge meat and pan with flour; place in hot oven so that surface will be seared and too much juice will not escape; when flour is brown, reduce heat (if meat is lean, it may be necessary to add fat trimmings); baste every ten minutes; takes about one hour and a half to cook properly; when about half cooked, turn over so that skin side will be finally uppermost. Sometimes add water to prevent flour burning in pan, but this is not generally necessary. *Gravy*: Remove most of fat from pan, place in front of stove, add four tablespoons flour, and stir until brown; add gradually one and a half cups boiling water, cook five minutes, season with salt and pepper, and strain.

Bacon: Cut thin slices, put in hot frying pan, cook until crisp and brown on both sides, turning often; pour off fat, place bacon on platter.

Bacon and Eggs: Same as above except the eggs are fried in the bacon fat before being poured off.

Warmed Over Roast Beef: Slice cold roast beef, place in platter, reheat gravy, pour it over beef slices. Do not put beef in gravy and reheat; makes it tough.

Lamb or Mutton Chops: On wire broiler, cook like broiled steak. *In pan:* Place in very hot frying pan; sear one side, turn and sear other; brown both sides, takes about seven minutes; sprinkle with salt when half cooked; when cooked, put on hot platter without gravy, spread with butter.

Broiled Leg of Mutton: Place in a kettle, and cover with boiling water, bring quickly to the boiling point, boil five minutes, skim, put on back of range and simmer until meat is tender; when half done, add one tablespoon salt.

Meat Pie:
Knuckle of veal
1 slice onion
1 slice carrot
1 piece of bay leaf
Sprig of parsley
12 peppercorns
Blade of mace
2 teaspoons salt
½ lb lean raw ham
4 tablespoons flour
4 tablespoons butter
2 doz. bearded oysters

Remove meat from bones, cover bones with cold water, add vegetables and seasonings, heat slowly to boiling point; add meat, boil five minutes, let simmer until meat is tender, remove meat and reduce liquid to two cups; put ham in lukewarm water in frying pan, leave on back of stove for one hour; brown butter, add flour, brown, add stock; add veal and ham cut into cubes; simmer twenty minutes, add oysters; put in dish, cover with top made of puff paste baked separately and placed on pie just before serving.

Pork Chops: Cook practically the same way as lamb chops.

Broiled Ham: Cut ham in thin slices, soak an hour in lukewarm water; take out, broil three minutes in pan.

Fried Ham and Eggs: Slice ham, remove half of fat layer, soak in tepid water for thirty minutes; put in hot pan and brown on both sides, remove ham; fry eggs in the ham fat. If boiled ham is used, it should not be soaked.

POULTRY AND GAME

Broiled Chicken: Dress for broiling. Sprinkle with salt and pepper; place in a well greased broiler; broil twenty minutes over a clear fire, watching carefully and turning broiler so that

all parts may be equally browned. Remove to a hot platter, spread with soft butter, and sprinkle with salt and pepper. Place chicken in dripping-pan, skin side down, sprinkle with salt and pepper, dot over with butter, and bake.

Fried Chicken: Clean, singe, and cut two young chickens in pieces for serving. Plunge in cold water, drain, but do not wipe. Sprinkle with salt and pepper, and coat thickly with flour, having as much flour adhere to chicken as possible. Try out one pound salt pork cut in pieces, and cook chicken slowly in fat until tender and well browned. Serve with white sauce made of half milk and half cream.

Note: It is always best to salt any fowl and let it stand for several hours; as salt draws out the blood; then wash before cleaning.

Chicken Pie: Dress, clean, and cut up two chickens. Put in a stewpan with one-half onion, sprig of parsley, and bit of bay leaf; cover with boiling water, and cook slowly until tender. When chicken is half cooked, add one-half tablespoon salt and one-eighth teaspoon pepper. Remove chicken, strain stock, skim off fat, and then cook until reduced to four cups. Thicken stock with one-third cup flour diluted with cold water to pour easily. Place a small cup in centre of baking-dish, arrange around it pieces of chicken, removing some of the larger bones; pour over gravy, and cool. Cover with pie-crust in which several incisions have been made, thus providing an outlet for escape of steam and gasses. Wet edge of crust and put around a rim, having rim come close to edge. Bake in a moderate oven until crust is well risen and browned. Roll remnants of pastry and cut in diamond-shaped pieces, bake, and serve with pie when reheated.

Roast Turkeys Dress, clean, stuff, and truss the turkey; place on its side on rack in a dripping-pan, rub entire surface with salt, and spread breast, legs, and wings with one-third cup butter, rubbed until creamy and mixed with one-fourth cup flour; dredge bottom of pan with flour; place in hot oven, and when flour on turkey begins to brown, reduce heat, baste with fat in pan, and add two cups boiling water; continue basting every fifteen minutes until turkey is cooked, which will require about three hours; (For basting, use one-half cup butter melted in one-half cup boiling water, and after this is used, baste with fat in pan); turn tur-

key often so that it may brown evenly; (if turkey is browning too fast, cover with buttered paper to prevent burning); remove strings and skewers before serving; garnish with parsley, or celery tips, or curled celery and rings and disks of carrots strung on fine wire.

For stuffing, use double the quantities given in recipes herewith.

Chestnut Stuffing:

3 cups French chestnuts
½ cup butter
1 teaspoon salt
⅛ teaspoon pepper
¼ cup cream
1 cup cracker crumbs

Shell and blanch chestnuts; cook in boiling salted water until soft; drain and mash, using a potato ricer; add one-half the butter, salt, pepper, and cream; melt remaining butter, mix with cracker crumbs, then combine mixtures.

Chicken stuffing:

1 cup cracker crumbs
¼ cup melted butter
Sage or poultry seasoning
Salt
Pepper
⅔ cup scalded milk

Melt butter in water; and pour over crackers after seasonings have been added.

FISH

Planked Shad or Whitefish: Clean and split a three-pound shad; put skin side down on an oak plank one inch thick, and longer and wider than the fish; sprinkle with salt and pepper; brush over with melted butter; bake twenty-five minutes in hot oven; remove from oven, spread with butter, and garnish with parsley and lemon. The fish should be sent to table on plank.

Fried Fish: Clean fish, leaving on heads and tails; sprinkle with salt and pepper, dip in flour, egg, and crumbs, and fry three to four minutes in deep fat; as soon as fish are put into fat, remove fat to back of range so that they may not become too brown before cooked through; arrange on hot platter, garnish with parsley, lemon, and fried gelatine, serve with sauce.

Fried Fillet of Halibut or Flounder: Clean fish and cut in long or short fillets; (if cut in long fillets, roll, and fasten with small wooden skewers); sprinkle fillets with salt and pepper, dip in crumbs, egg, and crumbs, fry in deep fat, and drain on brown paper; serve with sauce.

Fried Oysters: Clean, and dry between towels, selected oysters; season with salt and pepper, dip in flour, egg, and cracker or stale bread crumbs, and fry in deep fat; drain on brown paper and serve on a folded napkin; garnish with parsley and serve.

EGGS

Boiled Eggs: Have ready a saucepan containing boiling water. Carefully put in with a spoon the number of eggs desired, covering them with water; remove saucepan to back of stove, where water will not boil; cook from six to eight minutes if "soft-boiled", forty to forty-five if "hard-boiled".

Poached Eggs: Have ready a shallow pan two-thirds full of boiling salted water, allowing one-half tablespoon salt to one quart of water. Put two or three buttered muffin rings in the water; break each egg separately into a cup, and carefully slip into a muffin ring; (the water should cover the eggs); when there is a film over the top of egg and the white is firm, carefully remove with a buttered skimmer to circular pieces of buttered toast, and let each person season his own egg with butter, salt, and pepper. An egg-poacher may be used instead of muffin rings.

Scrambled Eggs:

5 eggs
½ cup milk
2 tablespoons butter
½ teaspoon salt
⅛ teaspoon pepper

Beat eggs slightly with silver form; add salt, pepper, and milk; heat omelet pan, put in butter, and when melted, turn in the mixture; cook until of creamy consistency, stirring and scraping from botton of pan. Some persons prefer to omit the milk.

Plain Omelet:

4 eggs
½ teaspoon salt
Few grains pepper
4 tablespoons hot water
1 tablespoon butter
1½ cups thin white sauce

Separate yolks from whites; beat yolks until thick and lemon-colored; add salt, pepper, and hot water; beat whites until stiff and dry, cutting and folding them into first mixture until they have taken up mixture; heat omelet pan, and butter sides and bottom; turn in mixture, spread evenly, place on range where it will cook slowly, occasionally turning the pan that omelet may brown evenly; when well "puffed", and delicately browned underneath,

place pan on centre grate of oven to finish cooking the top. The omelet is cooked if it is firm to the touch when pressed by the finger. Fold, and turn on hot platter and pour around one and one-half cups thin white sauce.

BEVERAGES

Hot Tea:

3 teaspoons tea
2 cups boiling water

Put tea in teapot and pour on boiling water. Let stand on back of range or in a warm place five minutes. Strain and serve immediately, with or without sugar and milk. Avoid second steeping of leaves with addition of a few fresh ones. If this is done, so large an amount of tannin is extracted that various ills are apt to follow.

Iced Tea:

4 teaspoons tea
2 cups boiling water

Follow recipe for hot tea. Strain into glasses one third full of cracked ice. Sweeten to taste, and allow one slice lemon to each glass tea.

Boiled Coffee: Do not use tin coffeepot, as coffee is apt to form a poisonous compound with the tin. Use granite ware.

1 cup coffee
1 egg
1 cup cold water
6 cups boiling water

Break egg and beat slightly. Dilute with one-half the cold water, add crushed shell, and mix with coffee. Turn into coffeepot, pour on boiling water, and stir thoroughly. Place on front of range, and boil three minutes. If not boiled, coffee is cloudy; if boiled too long, too much tannic acid is developed. The spout of pot should be covered or stuffed with soft paper to prevent escape of aroma. Stir and pour some in a cup to be sure that spout is free from grounds. Return to coffeepot and repeat. Add remaining cold water, which perfects clearing. Cold water being heavier than hot water sinks to the bottom, carrying grounds with it. Place on back of range for ten minutes, where coffee will not boil. Serve at once.

Breakfast Cocoa:

1½ tablespoons prepared cocoa
2 tablespoons sugar
Few grains salt
2 cups boiling water
2 cups milk

Scald milk. Mix cocoa, sugar, and salt; dilute with one-half cup boiling water to make smooth paste; add remaining water, and boil one minute; turn into scalded milk and beat ten minutes, using Dover egg-beater, when froth will form, preventing scum.

Chocolate:

1½ squares Baker's chocolate
¼ cup sugar
3 cups milk
Few grains salt
1 cup boiling water

Scald milk. Melt chocolate in small saucepan placed over hot water, add sugar, salt, and gradually boiling water; when smooth, place on range and boil one minute; add to scalded milk, beat with egg-beater to prevent scum, and serve with whipped cream. One and one-half ounces vanilla chocolate may be substituted for Baker's chocolate; being sweetened, less sugar is required.

BREAD

Water Bread:

2 cups boiling water
1 tablespoon water
1 tablespoon lard
1 tablespoon sugar
1½ teaspoons salt
¼ yeast cake dissolved in ¼ cup lukewarm water
6 cups sifted flour

Put butter, lard, sugar, and salt in bread raiser, or large bowl without a lip; pour on boiling water; when lukewarm, add dissolved yeast cake and five cups flour; then stir until thoroughly mixed, using a knife or mixing spoon. Add remaining flour, mix, and turn on a floured board, leaving a clean bowl; knead until mixture is smooth, elastic to touch, and bubbles may be seen under the surface. Some practice is required to knead quickly, but the motion once acquired will never be forgotten. Return to bowl, cover with a clean cloth kept for the purpose, and board or tin cover; let rise over night in temperature of 65 degrees F. In morning cut down; this is accomplished by cutting through and turning over dough several times with a case knife, and checks fermentation for a short time; dough may be again raised, and recut down if it is not convenient to shape into loaves or biscuits after first cutting. When properly cared for, bread need never sour. Toss on board slightly floured, knead, shape into loaves or biscuits, place in greased pans, having pans nearly half full. Cover, let rise again to double its bulk, and bake in hot oven. This takes nearly an hour to brown the bread.

Rolls:

2 cups scalded milk
2 tablespoons sugar
3 tablespoons butter
Flour
1 teaspoon salt
1 yeast cake dissolved in ¼ cup lukewarm water

Add butter, sugar, and salt to milk; when lukewarm, add dissolved yeast cake and three cups flour. Beat thoroughly, cover, and let rise until light; cut down, and add enough flour to knead (it will take about two and one-half cups). Let rise again, toss on slightly floured board, knead, pat, and roll out to one-third inch thickness. Shape with biscuit-cutter, first dipped in flour. Dip the handle of a case knife in flour, and with it make a crease through the middle of each piece; brush over one-half of each piece with melted butter, fold, and press edges together. Place in greased pan, one inch apart, cover, let rise, and bake in hot oven twelve to fifteen minutes. As rolls rise they will part slightly; if hastened in rising, are apt to lose their shape.

Muffins:

1 cup scalded milk
1 cup boiling water
2 tablespoons butter
¼ cup sugar
¾ teaspoon salt
¼ yeast cake
4 cups flour
1 egg

Add butter, sugar and salt to milk and water; when lukewarm, add yeast cake, and when dissolved, egg well beaten, and flour; beat thoroughly, cover and let rise over night. In morning, fill buttered muffin rings two-thirds full; let rise until rings are full, and bake thirty minutes in hot oven.

Toast: Cut stale bread in one-fourth inch slices. Crust may or may not be removed. Put slices on wire toaster, lock toaster and place over clear fire to dry, holding some distance from coals; turn and dry other side. Hold nearer to coals and color a golden brown on each side. Toast, if piled compactly and allowed to stand, will soon become moist.

Milk Toast:

1 pint scalded milk
2 tablespoons butter
2½ tablespoons bread flour
½ teaspoon salt
Cold water
6 slices dry toast

Add cold water gradually to flour to make a smooth, thin paste. Add to milk, stirring constantly until thickened, cover,

and cook twenty minutes; then add salt and butter in small pieces. Dip slices of toast separately in sauce; when soft, remove to serving dish. Pour remaining sauce over all.

Baking Powder Biscuits:

2 cups flour
4 teaspoons baking powder
1 teaspoon salt
1 tablespoon butter
1 tablespoon lard
¾ cup milk and water in equal parts

Mix dry ingredients, and sift twice. Work in butter and lard with tips of fingers; add gradually the liquid, mixing with knife to a soft dough. It is impossible to determine the exact amount of liquid, owing to differences in flour. Toss on a floured board, pat and roll lightly to one-half inch in thickness. Shape with a biscuit-cutter. Place on buttered pan, and bake in hot oven twelve to fifteen minutes. If baked in too slow an oven, the gas will escape before it has done its work. Many obtain better results by using bread flour.

Egg Muffins:

3½ cups flour
6 teaspoons baking powder
1 teaspoon salt
3 tablespoons sugar
1⅓ cups milk
3 tablespoons melted butter
1 egg

Mix and sift dry ingredients; add gradually milk, egg well beaten, and melted butter. Bake in buttered gem pans twenty-five minutes. If iron pans are used, they must be previously heated. This recipe makes thirty muffins.

Griddle Cakes:

3 cups flour
1½ tablespoons baking powder
1 teaspoon salt
2 tablespoons melted butter
¼ cup sugar
2 cups milk
1 egg

Mix and sift dry ingredients; beat egg, add milk, and pour slowly on first mixture. Beat thoroughly, and add butter. Drop by spoonfuls on a greased hot griddle; cook on one side. When puffed, full of bubbles, and cooked on edges, turn, and cook other side. Begin cooking cakes at once or more baking powder will be required.

Buckwheat Cakes:

⅓ cup fine bread crumbs
2 cups scalded milk
½ teaspoon salt
1 tablespoon molasses
¼ yeast cake
½ cup lukewarm water
1¾ cups buckwheat flour

Pour milk over crumbs, and soak thirty minutes; add salt, yeast cake dissolved in lukewarm water, and buckwheat to make a batter thin enough to pour. Let rise over night; in the morning, stir well, add molasses, one-fourth teaspoon soda dissolved in one-fourth cup lukewarm water, and cook same as griddle cakes. Save enough batter to raise another mixing, instead of using yeast cake; it will require one-half cup.

Waffles:

1¾ cups flour
3 teaspoons baking powder
½ teaspoon salt
1 tablespoon melted sugar
1 cup milk
Yolks 2 eggs
Whites 2 eggs

Mix and sift dry ingredients; add milk gradually, yolks of eggs well beaten, butter, and whites of eggs beaten stiff; cook on a greased hot waffle-iron. Serve with maple syrup.

VEGETABLES, ETC.

String Beans: Remove strings, and snap or cut in one-inch pieces; wash, and cook in boiling water from one to three hours, adding salt last half hour of cooking. Drain, season with butter and salt. Some persons cook beans with salt pork, no butter.

Shell Beans: Wash and cook in boiling water from one to one and a half hours, adding salt last half hour of cooking. Cook in sufficiently small quantity of water, that there may be none left to drain off when beans are cooked. Season with butter and salt.

Boiled Cabbage: Take off outside leaves, cut in quarters, and remove tough stalk. Soak in cold water and cook in an uncovered vessel in boiling salted water, to which is added one-fourth teaspoon soda; this prevents disagreeable odor during cooking. Cook from thirty minutes to one hour, drain, and serve; or chop, and season with butter, salt, and pepper.

Boiled Corn: Remove husks and silky threads. Cook ten to twenty minutes in boiling water. Place on platter covered with napkin; draw corners of napkin over corn; or cut from cob and season with butter and salt.

Boiled Beet Greens: Wash thoroughly and scrape roots, cutting off ends. Drain, and cook one hour or until tender in a small quantity boiling salted water. Season with butter, salt and pepper. Serve with vinegar.

Boiled Onions: Put onions in cold water and remove skins while under water. Drain, put in a saucepan, and cover with boiling salted water; boil five minutes, drain, and again cover with boiling salted water. Cook one hour or until soft, but not broken. Drain, add a small quantity of milk, cook five minutes, and season with butter, salt, and pepper.

Boiled Peas: Remove peas from pods, cover with cold water, and let stand for one-half hour. Skim off undeveloped peas which rise to top of water, and drain remaining peas. Cook until soft in a small quantity of boiling water, adding salt the last fifteen minutes of cooking—cooking will take about thirty minutes. There should be but little, if any, water to drain from peas when they are cooked. Season with butter, salt, and pepper. If peas have lost much of their natural sweetness, they are improved by the addition of a small amount of sugar.

Sliced Tomatoes: Wipe and cover with boiling water, let stand one minute, when they can be easily skinned. Chill thoroughly and cut in one-third inch slices.

Stewed Tomatoes: Wipe, pare, cut in pieces, put in stewpan, and cook slowly twenty minutes, stirring occasionally. Season with butter, salt, and pepper.

Mashed Turnip: Wash and pare turnips, cut in slices or quarters, and cook in boiling salted water until soft. Drain, mash, and season with butter, salt, and pepper.

Baked White (Irish) Potatoes: Select smooth, medium-sized potatoes. Wash, using a vegetable brush, and place in dripping-pan. Bake in hot oven forty minutes or until soft, remove from oven, and serve at once. If allowed to stand, unless the skin is ruptured to allow escape of steam which otherwise becomes water, they become soggy.

Boiled White (Irish) Potatoes: Select potatoes of uniform size. Wash, pare, and drop at once in cold water to prevent discoloration; soak one-half in the fall, and one to two hours in winter and spring. Cook in boiling salted water until soft, which is easily determined by piercing with a skewer. For seven potatoes

allow one tablespoon salt, and boiling water to cover. Drain from water, and keep uncovered in warm place until serving time. In boiling large potatoes, it often happens that outside is soft, while centre is underdone. To finish cooking without potatoes breaking apart, add one pint cold water, which drives heat to centre, thus accomplishing the cooking.

Mashed White (Irish) Potatoes: Force five hot boiled potatoes through a coarse strainer. Add three tablespoons butter, one teaspoon salt, few grains pepper, and one-third cup hot milk; beat with fork until creamy, reheat, and pile lightly in hot dish.

French Fried White (Irish) Potatoes: Wash and pare small potatoes, cut in eighths lengthwise, and soak one hour in cold water. Take from water, dry between towels, and fry in deep fat. Drain on brown paper and sprinkle with salt. Care must be taken that fat is not too hot, as potatoes must be cooked as well as browned.

Baked Sweet Potatoes: Prepare and cook same as white potatoes.

Sweet Potatoes, Southern Style: Cut cold boiled sweet potatoes in one-third inch slices. Put a layer in buttered baking dish, and much sugar on top; dot over with about half as much butter as sugar. Repeat, cover with buttered cracker crumbs, and bake until the crumbs are brown.

Hashed Brown Potatoes: Try out fat salt pork cut in small cubes, remove scraps; there should be about one-third cup of fat. Add two cups cold boiled potatoes finely chopped, one-eighth teaspoon pepper, and salt if needed. Mix potatoes thoroughly with fat; cook three minutes, stirring constantly; let stand to brown underneath. Fold as an omelet and turn on hot platter.

Baked Macaroni with Cheese: Put a layer of boiled macaroni (macaroni boiled in salt water until soft) in buttered baking dish, sprinkle with grated cheese; repeat; pour over white sauce, cover with buttered crumbs, and bake until crumbs are brown.

Rice Croquettes With Jelly:

½ cup rice
½ cup boiling water
1 cup scalded milk
½ teaspoon salt
Yolks 2 eggs
1 tablespoon butter

Wash rice, add to water with salt, cover, and steam until rice has absorbed water. Then add milk, stir lightly with a fork,

cover, and steam until rice is soft. Remove from fire, add egg yolks and butter; spread on a shallow plate to cool. Shape in balls, roll in crumbs, fry in deep fat, and drain. Put a cube of jelly in each croquette.

SOUPS, ETC.

Chicken Soup:

- 6 cups stock
- 1 tablespoon lean raw ham, finely chopped
- 6 slices carrot, cut in cubes
- ⅓ cup hot boiled rice
- 2 stalks celery
- ½ bay leaf
- ¼ teaspoon peppercorns
- 1 sliced onion

Add seasonings to stock, heat gradually to boiling point, and boil thirty minutes; strain, and add rice.

Oyster Soup:

- 1 quart oysters
- 4 cups milk
- 1 slice onion
- 2 stalks celery
- 2 blades mace
- Sprig of parsley
- Bit of bay leaf
- ⅓ cup flour
- ⅓ cup butter
- Salt and pepper

Clean and pick oysters. Reserve liquor, add oysters slightly chopped, heat slowly to boiling point, and let simmer twenty minutes. Strain through cheesecloth, reheat liquor, and thicken with butter and flour cooked together. Scald milk with onion, celery, mace, parsley, and bay leaf; remove seasonings, and add to oyster liquor. Season with salt and pepper.

Baked Bean Soup:

- 3 cups cold baked beans
- 3 pints water
- 2 slices onions
- 2 stalks celery
- 1 ½ cups stewed and strained tomatoes
- 2 tablespoons butter
- 2 tablespoons flour
- 1 tablespoon Chili sauce
- Salt
- Pepper

Put beans, water, onion, and celery in saucepan; bring to boiling point and simmer thirty minutes. Rub through sieve, add tomato, and Chili sauce, season to taste with salt and pepper, and bind with the butter and flour cooked together.

Vegetable Soup:

- ⅓ cup carrot
- ⅓ cup turnip
- 1 quart water
- 5 tablespoons butter

½ cup celery
1½ cups potato
½ onion
½ tablespoon finely chopped parsley
Salt and pepper

Wash and scrape a small carrot; cut into small bits. Wash and pare half a turnip and slice into small bits. Wash, pare, and cut potatoes into small pieces. Wash and scrape celery and cut into quarter-inch pieces. Prepare vegetables before measuring. Cut onion into thin slices. Mix vegetables (except potatoes); and cook ten minutes, in four tablespoons butter, stirring constantly. Add potatoes, cover, and cook two minutes. Add water, and boil one hour. Beat with spoon or fork to break vegetables. Add remaining butter and parsley. Season with salt and pepper.

Croutons: Cut stale bread into one-third inch slices and remove crusts. Spread thinly with butter. Cut slices into one-third inch cubes, put in pan and bake until delicately brown, or fry in deep fat.

SALADS, DRESSINGS, ETC.

French Dressing:

½ teaspoon salt
¼ teaspoon pepper
2 tablespoons vinegar
4 tablespoons olive oil

Mix ingredients and stir until well blended. Some prefer the addition of a few drops onion juice.

Mayonnaise Dressing:

1 teaspoon mustard
1 teaspoon salt
1 teaspoon powdered sugar
Few grains cayenne
Yolks 2 eggs
2 tablespoons lemon juice
2 tablespoons vinegar
1½ cups olive oil

Mix dry ingredients, add egg yolks, and when well mixed add one-half teaspoon of vinegar. Add oil gradually, at first drop by drop, and stir constantly. As mixture thickens, thin with vinegar or lemon juice. Add oil, and vinegar or lemon juice alternately, until all is used, stirring or beating constantly. If oil is added too rapidly, dressing will have a curdled appearance. A smooth consistency may be restored by taking yolk of another egg and adding curdled mixture slowly to it. It is desirable to have bowl containing mixture placed in a larger bowl of crushed ice, to which a small quantity of water has been added. Olive oil for making mayonnaise should always be thoroughly chilled. A silver fork, wire whisk, small wooden spoon or Dover egg-beater

may be used as preferred. Mayonnaise should be stiff enough to hold its shape. It soon liquifies when added to meat or vegetables; therefore it should be added just before serving time.

Lettuce and Tomato Salad: Peel and chill three tomatoes. Cut in halves crosswise, arrange each half on a lettuce leaf. If tomatoes are small, cut in quarters, and allow one tomato to each lettuce leaf. Garnish with mayonnaise dressing forced through a pastry bag and tube.

Oil Dressing:

4 hard-boiled eggs
4 tablespoons oil
4 tablespoons vinegar
½ tablespoon sugar
½ teaspoon mustard
½ teaspoon salt
Few grains cayenne
White 1 egg

Force yolks of hard-boiled eggs through a strainer, then work, using a silver or wooden spoon, until smooth. Add sugar, mustard, salt, and cayenne, and when well blended add gradually oil and vinegar, stirring and beating until thoroughly mixed; then cut and fold in white of egg beaten until stiff.

Egg Salad: Cut six hard-boiled eggs in halves crosswise, keeping whites in pairs. Remove yolks, and mash or put through a potato ricer. Add slowly enough oil dressing to moisten. Make into balls the size of original yolks and refill whites. Arrange on a bed of lettuce, and pour oil dressing around eggs.

Cheese Salad: Arrange one head lettuce on salad dish, sprinkle with Edam cheese broken in small pieces, and pour over French dressing.

Nut Salad: Mix one cup chopped English walnut meats and two cups shredded lettuce. Arrange on lettuce leaves and garnish with mayonnaise dressing.

Waldorf Salad: Mix equal quantities of finely cut apple and celery, and moisten with mayonnaise dressing. Garnish with curled celery and canned pimentos cut in strips or fancy shapes. An attractive way of serving this salad is to remove tops from red or green apples, scoop out inside pulp, leaving just enough adhering to skin to keep apples in shape. Refill shells thus made with the salad, replace tops, and serve on lettuce leaves.

Grape Fruit and Celery Salad: Cut medium-sized grape fruit in thirds, lengthwise. Remove the pulp, and add to it an equal quantity of finely cut celery. Refill sections with mixture,

mask with mayonnaise dressing, and garnish with celery tips or curled celery and canned pimentos cut in strips.

Cheese Balls:

1½ cups grated mild cheese
1 tablespoon flour
¼ teaspoon salt
Few grains cayenne
Whites 3 eggs
Cracker dust

Mix cheese with flour and seasonings. Beat whites of eggs until stiff, and add to first mixture. Shape in small balls, roll in cracker dust, fry in deep fat, and drain on brown paper. Serve with salad course.

Compote of Rice and Peaches: Wash two-thirds cup rice, add one cup boiling water, and steam until rice has absorbed water; then add one and one-third cups hot milk, one teaspoon salt, and one-fourth cup sugar. Cook until rice is soft. Turn into a slightly buttered round shallow mould. When shaped, remove from mould to serving dish, and arrange on top sections of cooked peaches drained from their syrup and dipped in macaroni dust. Garnish between sections with candied cherries and angelica cut in leaf-shapes. Anglica may be softened by dipping in hot water. Color peach syrup with fruit red, and pour around mould.

Compote of Rice and Pears: Same as above, except use pears and pear syrup instead of peaches and peach syrup.

SAUCES, PICKLES, ETC.

Thin White Sauce:

2 tablespoons butter
1½ tablespoons flour
Few grains pepper
1 cup scalded milk
¼ teaspoon salt

Put butter in saucepan, stir until melted and bubbling; add flour blended with seasonings, and stir until thoroughly blended. Pour on gradually the milk, adding about one-third at a time, stirring until well mixed, then beating until smooth and glossy.

White Sauce:

Same as Thin White Sauce, except more flour.

Brown Sauce:

2 tablespoons butter
½ slice onion
3 tablespoons flour
1 cup meat stock
¼ teaspoon salt
⅛ teaspoon pepper

Cook onion in butter until slightly browned; remove onion and stir butter constantly until well browned; add flour mixed with seasonings, and brown the butter and flour, then add stock gradually.

Tomato Sauce:

½ can tomatoes
1 teaspoon sugar
8 peppercorns
Bit of bay leaf
½ teaspoon salt
4 tablespoons butter
4 tablespoons flour
1 cup meat stock

Cook tomatoes twenty minutes with sugar, peppercorns, bay leaf, and salt; rub through a strainer, and add stock; brown the butter, add flour, and when well browned, gradually add hot liquid.

Bechamel Sauce:

1½ cups thin meat stock
1 slice carrot
1 slice onion
Bit of bay leaf
Sprig of parsley
⅛ teaspoon pepper
6 peppercorns
¼ cup butter
¼ cup flour
1 cup scalded milk
½ teaspoon salt

Cook stock twenty minutes with onion, carrot, bay leaf, parsley, and peppercorns, then strain; there should be one cupful. Melt the butter, add flour, and gradually hot stock and milk. Season with salt and pepper.

Ripe Cucumber Pickle: Cut cucumbers in halves lengthwise. Cover with alum water, allowing two teaspoons powdered alum to each quart of water. Heat gradually to boiling point, then let stand on back of range two hours. Remove from alum water and chill in ice water. Make a syrup by boiling five minutes two pounds sugar, one pint vinegar, with two tablespoons each of white cloves and stick cinnamon tied in a piece of muslin. Add cucumbers and cook ten minutes. Remove cucumbers to a stone jar, and pour over the syrup. Scald syrup three successive mornings, and return to cucumbers.

Chopped Pickles:

4 quarts chopped green tomatoes
¾ cup salt
2 teaspoons pepper
3 teaspoons mustard
3 teaspoons cinnamon
2 quarts vinegar
3 teaspoons allspice
3 teaspoons cloves
½ cup white mustard seed
4 green peppers, sliced
2 chopped onions

Add salt to tomatoes, cover, let stand twenty-four hours, and drain. Add spices to vinegar, and heat to boiling point; then add tomatoes, peppers, and onions, bring to boiling point, and cook fifteen minutes after boiling point is reached. Store in a stone jar and keep in a cool place.

DESSERTS: PUDDINGS, PIES, CAKES, ETC.

Rice Pudding:

4 cups milk
⅓ cup rice
Grated rind ½ lemon
½ teaspoon salt
⅓ cup sugar

Wash rice, mix ingredients, and pour into buttered pudding dish; bake three hours in very slow oven, stirring three times during first hour of baking to prevent rice from settling.

Bread Pudding:

2 cups stale bread crumbs
1 quart scalded milk
⅓ cup sugar
¼ cup melted butter
2 eggs
½ teaspoon salt
1 teaspoon vanilla or
¼ teaspoon spice

Soak bread crumbs in milk, set aside until cool; add sugar, butter, eggs slightly beaten, salt, and flavoring; bake one hour in buttered pudding dish in slow oven; serve with vanilla sauce. In preparing bread crumbs for puddings avoid using outside crusts.

Chocolate Pudding:

¼ cup butter
1 cup sugar
Yolks 2 eggs
½ cup milk
1⅜ cups flour
3 teaspoons baking powder
Whites 2 eggs
1⅓ squares Baker's chocolate
⅓ teaspoon salt
¼ teaspoon vanilla

Cream the butter, and add one-half the sugar gradually. Beat yolks of eggs until thick and lemon-colored, and add, gradually, remaining sugar. Combine mixtures, and add milk alternately with flour mixed and sifted with baking powder and salt; then add whites of eggs beaten until stiff, melted chocolate, and vanilla. Bake in an angel cake pan, remove from pan, cool, fill the center with whipped cream, sweetened and flavored, and pour around.

Chocolate Sauce: Boil one cup sugar, one-half cup water, and a few grains of cream of tarter until of the consistency of a thin syrup. Melt one and one-half squares Baker's chocolate and

pour on gradually the hot syrup. Cook slightly, and flavor with one-fourth teaspoon vanilla.

Cottage Pudding:

¼ cup butter
⅔ cup sugar
1 egg
½ teaspoon salt
1 cup milk
2¼ cups flour
4 teaspoons baking powder

Cream the butter, add sugar gradually, and egg well beaten; mix and sift flour, baking powder, and salt; add alternately with milk to first mixture; turn into buttered cake pan; bake thirty-five minutes. Serve with vanilla sauce.

Lemon Sauce:

½ cup sugar
1 cup boiling water
1 tablespoon cornstarch or
1½ tablespoons flour
2 tablespoons butter
1½ tablespoons lemon juice
Few gratings nutmeg
Few grains salt

Mix sugar and cornstarch, add water gradually, stirring constantly; boil five minutes, remove from fire, add butter, lemon juice, and nutmeg.

Vanilla Sauce: Make same as lemon sauce, using one teaspoon vanilla in place of lemon juice and nutmeg.

Hard Sauce:

⅓ cup butter
1 cup powdered sugar
⅓ teaspoon lemon extract
⅔ teaspoon vanilla

Cream the butter, add sugar gradually, and flavoring.

Boiled Custard:

2 cups scalded milk
Yolks 3 eggs
½ teaspoon vanilla
¼ cup sugar
⅛ teaspoon salt

Beat eggs slightly, add sugar and salt; stir constantly while adding gradually hot milk. Cook in double boiler, continue stirring until mixture thickens and a coating is formed on the spoon, strain immediately; chill and flavor. If cooked too long the custard will curdle; should this happen, by using a Dover egg-beater it may be restored to a smooth consistency, but custard will not be as thick. Eggs should be beaten slightly for custard, that it may be of smooth, thick consistency. To prevent scum from forming, cover with a perforated tin. When eggs are scarce, use yolks two eggs and one-half tablespoon cornstarch.

Caramel Custard:

4 cups scalded milk
5 eggs
½ cup sugar
½ teaspoon salt
1 teaspoon vanilla

Put sugar in omelet pan, stir constantly over hot part of range until melted to a syrup of light brown color. Add gradually to milk, being careful that milk does not bubble up and go over, as is liable on account of high temperature of sugar. As soon as sugar is melted in milk, add mixture gradually to eggs slightly beaten; add salt and flavoring, then strain in buttered mould. Bake as custard. Chill and serve with caramel sauce.

Caramel Sauce:

½ cup sugar
½ cup boiling water

Melt sugar as for caramel custard, add water, simmer ten minutes; cool before serving.

Lemon Ice:

4 cups water
¾ cup lemon juice
2 cups sugar

Make a syrup by boiling water and sugar twenty minutes; add lemon juice; cool, strain, and freeze.

Orange Ice:

4 cups water
2 cups sugar
2 cups orange juice
¼ cup lemon juice
Grated rind of two oranges

Make syrup as for lemon ice; add fruit juice and grated rind; cool, strain, and freeze.

Milk Sherbet:

4 cups milk
Juice 3 lemons
1½ cups sugar

Mix juice and sugar, stirring constantly while slowly adding milk; if added too rapidly mixture will have a curdled appearance, which is unsightly, but will not affect the quality of sherbet; freeze and serve.

Vanilla Ice Cream:

2 cups scalded milk
1 tablespoon flour
1 cup sugar
2 tablespoons vanilla
1 egg
⅛ teaspoon salt
1 quart thin cream

Mix flour, sugar, and salt, add egg slightly beaten, and milk gradually; cook over hot water twenty minutes, stirring constantly at first, should custard have curded appearance, it will disappear in freezing. When cool, add cream and flavoring; strain and freeze.

Apple Pie:

4 or 5 sour apples
⅓ cup sugar
¼ teaspoon grated nutmeg
Few gratings lemon rind
⅛ teaspoon salt
1 teaspoon butter
1 teaspoon lemon juice

Line pie plate with paste. Pare, core, and cut the apples into eighths, put row around plate one-half inch from edge, and work towards centre until plate is covered; then pile on remainder. Mix sugar, nutmeg, salt, lemon juice, and grated rind, and sprinkle over apples. Dot over with butter. Wet edges of under crust, cover with upper crust, and press edges together.

Bake forty to forty-five minutes in moderate oven. A very good pie may be made without butter, lemon juice, and grated rind. Cinnamon may be substituted for nutmeg. Evaporated apples may be used in place of fresh fruit. If used, they should be soaked over night in cold water.

Custard Pie:

2 eggs
3 tablespoons sugar
Few gratings nutmeg
⅛ teaspoon salt
1½ cups milk

Beat eggs slightly, add sugar, salt, and milk. Line plate with paste, and build up a fluted rim. Strain in the mixture and sprinkle with few gratings nutmeg. Bake in quick oven at first to set rim, decrease the heat afterwards, as egg and milk in combination need to be cooked at low temperature.

Lemon Pie:

½ cup chopped apple
1 cup sugar
1 beaten egg
1 teaspoon melted butter
¼ cup rolled common crackers
2 tablespoons lemon juice
Grated rind 1 lemon

Mix ingredients in order given and bake with two crusts.

Pumpkin Pie:

1½ cups steamed and strained pumpkin
½ teaspoon ginger
½ teaspoon salt

⅔ cup brown sugar
1 teaspoon cinnamon
½ cup cream
2 eggs
1½ cups milk

Mix ingredients in order given and bake with no upper crust.

Tarts: Roll puff paste one-eighth inch thick. Shape with a fluted round cutter, first dipped in flour with a smaller cutter; remove centres from half the pieces, leaving rings one-half inch wide. Brush with cold water the larger pieces near the edge; fit on rings pressing lightly. Chill thoroughly, and bake fifteen minutes in hot oven. By brushing tops of rings with beaten yolk of egg diluted with one teaspoon water, they will have a glazed appearance. Cool, and fill with jam or jelly.

Gingerbread:

1 cup molasses
⅓ cup butter
1¾ teaspoons soda
½ cup sour milk
1 egg
2 cups flour
2 teaspoons ginger
½ teaspoon salt

Put butter and molasses in saucepan and cook until boiling point is reached. Remove from fire, add soda, and beat vigorously. Then add milk, egg well beaten, and remaining ingredients mixed and sifted. Bake fifteen minutes in buttered small tin pans, having pans two-thirds filled with mixture.

Ginger Snaps:

1 cup molasses
½ cup shortening
3¼ cups flour
½ teaspoon soda
1 tablespoon ginger
1½ teaspoons salt

Heat molasses to boiling point and pour over shortening. Add dry ingredients mixed and sifted. Chill thoroughly. Toss one-fourth of mixture on a floured board and roll as thinly as possible; shape with a small round cutter, first dipped in flour. Place near together on a buttered sheet and bake in a moderate oven. Gather up the trimmings and roll with another portion of dough. During rolling, the bowl containing mixture should be kept in a cool place, or it will be necessary to add more flour to dough, which makes cookies hard rather than crisp and short.

Chocolate Cakes:

3 eggs
¼ cup butter
½ cup sugar
3 squares Baker's chocolate
1 cup stale bread crumbs
3 tablespoons flour

Beat eggs until light. Cream the butter, add sugar, combine mixtures, then add chocolate melted, bread crumbs, and flour. Spread mixture in a shallow buttered pan and bake in a slow oven. Shape with a tiny biscuit cutter and put together in pairs with white mountain cream between and on top.

Jelly Roll:

3 eggs
1 cup sugar
½ tablespoon milk
1 tablespoon melted butter
1 teaspoon baking powder
¼ teaspoon salt
1 cup flour

Beat egg until light, add sugar gradually, milk, flour mixed and sifted with baking powder and salt, then butter. Line the bottom of a dripping pan with paper; butter paper and sides of pan. Cover bottom of pan with mixture, and spread evenly. Bake twelve minutes in a moderate oven. Take from oven and turn on a paper sprinkled with powdered sugar. Quickly remove paper, and cut off a thin strip from sides and ends of cake. Spread with jelly or jam which has been beaten to consistency to spread easily, and roll. After cake has been rolled, roll paper around cake that it may better keep in shape. The work must be done quickly, or cake will crack in rolling.

Egg Cake:

¼ cup of butter
½ cup sugar
1 egg
½ cup milk
1½ cups flour
2½ teaspoons baking powder

Cream the butter, add sugar gradually, and egg well beaten. Mix and sift flour and baking powder, add alternately with milk to first mixture. Bake thirty minutes in a shallow pan. Spread with chocolate frosting.

Currant Cake:

½ cup butter
1 cup sugar
2 eggs
Yolk 1 egg
1 tablespoon flour
½ cup milk
2 cups flour
3 teaspoons baking powder
1 cup currants

Cream the butter, add sugar gradually, and eggs and egg yolk well beaten. Then add milk, flour mixed and sifted with baking powder, and currants mixed with the tablespoon flour. Bake forty minutes in buttered and floured cake pan.

Velvet Cake:

½ cup butter
1½ cups sugar
Yolks 4 eggs
½ cup cold water
⅓ cup almonds, blanched, and shredded
1½ cups flour
½ cup cornstarch
4 teaspoons baking powder
Whites 4 eggs

Cream the butter, add sugar gradually, yolks of eggs well beaten, and water. Mix and sift flour, cornstarch, and baking powder, and add to first mixture; then add whites of eggs beaten until stiff. After putting in pan, cover with almonds and sprinkle with powdered sugar. Bake forty minutes in a moderate oven.

Pound Cake:

1 lb butter
1 lb sugar
Yolks 10 eggs
2 tablespoons brandy
Whites 10 eggs
1 lb flour
½ teaspoon mace

Cream the butter, add sugar gradually, and continue beating; then add yolks of eggs beaten until thick and lemon-colored, whites of eggs beaten until stiff and dry, flour, mace, and brandy. Beat vigorously five minutes. Bake in a deep pan one and one-fourth hours in a slow oven; or if it is to be used for fancy ornamented cakes, bake thirty to thirty-five minutes in a dripping pan.

Chocolate Filling:

2½ squares chocolate
1 cup powdered sugar
½ teaspoon vanilla
3 tablespoons milk
Yolk 1 egg

Melt chocolate over hot water, add one-half the sugar, and milk; add remaining sugar, and yolk of egg; then cook in double boiler until it thickens, stirring constantly at first, that mixture may be perfectly smooth. Cool slightly, flavor, and spread.

Plain Frosting:

White 1 egg
2 teaspoons cold water
¾ cup confectioner's sugar
½ teaspoon vanilla or
½ tablespoon lemon juice

Beat white of egg until stiff; add water and sugar. Beat thoroughly, then add flavoring. Use more sugar if needed. Spread with a broad-bladed knife.

Chocolate Frosting:

1½ squares chocolate
⅓ cup scalded cream
Few grains salt
½ teaspoon vanilla
Yolk 1 egg
½ teaspoon melted butter
Confectioner's sugar

Melt chocolate over hot water, add cream gradually, salt, yolk of egg, and butter. Stir in the confectioner's sugar until of right consistency to spread; then add flavoring.

White Mountain Cream:

1 cup sugar
⅓ cup boiling water
White 1 egg
1 teaspoon vanilla or
½tablespoon lemon juice

Put sugar and water in saucepan, and stir to prevent sugar from adhering to saucepan; heat gradually to boiling point, and boil without stirring until syrup will thread when dropped from tip of spoon or tines of silver fork. Pour syrup gradually on beaten white of egg, beating mixture constantly, and continue beating until of right consistency to spread; then add flavoring and pour over cake, spreading evenly with back of spoon. Crease as soon as firm. If not beaten long enough, frosting will run; if beaten too long, it will not be smooth. Frosting beaten too long may be improved by adding a few drops of lemon juice or boiling water. This frosting is soft inside, and has a glossy surface. If frosting is to be ornamented with nuts or candied cherries, place them on frosting as soon as spread.

Apple Jelly: Wipe apples, remove stems and blossom ends, and cut in quarters. Put in a granite or porcelain-lined preserving kettle and add cold water to come nearly to top of apples. Cover, and cook slowly until apples are soft; mash and drain through coarse sieve. Avoid squeezing apples, which makes jelly cloudy. Then allow juice to drip through a double thickness of cheesecloth or a jelly bag. Boil twenty minutes, and add an equal quantity of heated sugar; boil five minutes, skim, and turn in glasses. Put in a sunny window, and let stand twenty-four hours. Cover, and keep in a cool, dry place. If apples are pared, a much lighter jelly may be made.

To heat sugar: Put in a granite dish, place in oven, leaving oven door ajar, and stir occasionally.

Blackberry Jam: Pick over blackberries. Mash a few in the bottom of a preserving kettle, using a wooden potato masher, and so continue until the fruit is used. Heat slowly to boiling point, and add gradually an equal quantity of heated sugar. Cook slowly forty-five minutes. Put in a stone jar or tumblers.

Raspberry Jam: Follow recipe for backberry jam, using raspberries instead of blackberries.

For more detailed information, see *The Boston Cooking School Cook Book,* price $2.00. *Mrs. Rorer's New Cook Book,* price $2.00.

CHAPTER III

SERVANTS

General Remarks. In many families, the wife has great difficulty in getting and keeping servants; in other families, there is no such trouble. While it is possible that the last families may be lucky, it is more probable that the wife has ability in handling servants and initiative in getting them. It is not altogether a question of wages. Many servants will work for less for one woman than they will for another, regardless of the amount of work. However, the number of servants is becoming proportionately less each year, and their self-asserted limitations of their duties are increasing. This is not strange; laborers are forming unions to reduce the hours of work and increase the wages. Servants have just as much intelligence.

The fixed rules to keep a servant are:

1. Have a definite understanding with her before employment; if possible, write this out in her presence and read it to her.
2. Pay her as much as is being paid for similar service in the vicinity.
3. Treat her like a human being.
4. Do not expect as much work and as much intelligence on her part as would be expected from yourself who could command in her position about four times as much money as wages.

CHARACTERISTICS

French servants are generally useful only in cities. The women are useful as ladies' maids, and the men as cooks in the restaurants and hotels. They have little ability for steady, hard work, except in homes in their own country. As this home class of French people does not come to the United States, it is safe to say that the average American family need make no attempt to employ or retain in employment a French servant.

Polish servants are generally available only on the Eastern coast of the United States. They are not as bright as French or Swedes; take more time to learn the English language; are unusually faithful when they understand what is expected; will work for little until they learn the language, when they generally marry some one from their own people.

Swedish or German servants are the best that can be obtained, after they have learned the language. They will work for little until they have learned the language; they then demand more than others (they demand this because they know they are worth it—any attempt to hold them for less will result in losing them altogether, as is to be expected); they learn very rapidly; are clean, faithful, and careful; they make unusually good nurses.

Irish servants have plenty of energy, and are the ideal servants if one has the knack of controlling them; they are affectionate with children, though they are apt to forget them because of other excitement; they are impudent and hard to control; they ask no more wages than they deserve, this being not quite so much as the Swedes demand.

Negro servants are the most suitable to the average wife, simply because the negro servant will be imposed upon and be humble when abused. This is what was expected in a servant in olden times, but very few except negroes will stand it now. The negro will ask for more than she is worth; but will not leave, simply because she cannot do better elsewhere. She is good natured; affectionate with children; careless; ignorant of sanitation; generally more or less unclean in the kitchen.

American servants are as good as any when they wish to be, but generally they do not wish to be; they have a most unalterable dislike of the name of servants, and insist on being called "help"; some of them also act the part, because they only help at work and actually do nothing of themselves; they prefer to work in a factory for less money at fixed hours, and be independent; the best ones make excellent servants, but they will at any moment leave, generally to marry some worthless man, who makes them support him; but even the married ones are not more satisfactory, because their husbands continually interfere in their affairs; they generally want more wages than they deserve, and, like the American laborer, they are working less and less each year, and living in ways mysterious.

EMPLOYMENT

Servants may be obtained from friends who are going away and who want to find a position for their servants, from families who are unwilling to part with them, and from employment agencies.

When a servant is recommended before discharge by a friend, a family is fortunate in securing her. A knowledge of the friend's methods of training will be a criterion of the value of this servant. At any rate, the chances are that this servant will be more valuable than one obtained otherwise.

It is generally looked upon as improper to hire a servant while she is being employed by another woman. This should be done only in cases of sickness. Also, a servant thus obtained is a servant who will leave at first opportunity to obtain a still better position. A servant cannot be blamed, in fact is rather to be commended for improving her condition; but the person hiring such a one is provided only with precarious service and has incurred the enmity of the former employer. In some rare cases, the former employer will agree to give her up, provided her position is manifestly improved.

Servants obtained through employment agencies are generally unsatisfactory. I know of several families who have each employed eight or ten servants from employment agencies, and none of them were satisfactory or were retained for any length of time. The reasons are evident: the demand for servants is greater than the supply; all housewives know the value of their neighbor's servants and are quick to offer a good one a position as soon as she is without one; only the least valuable ones have to go to an employment agency. Sometimes by luck, one may obtain from an employment agency a good servant whose value is unknown or who may have come to the locality from abroad or elsewhere.

In order to obtain good servants, a great deal of thought and foresight is necessary. Notice carefully the servants of your neighbors and friends; be prepared to make the first offer when one of them is without a position; if necessary, employ her as an extra servant until your former servant can be given a new place. After obtaining a servant, follow the rules already laid down, and keep her.

DUTIES

A very definite understanding should be had with a servant before hiring as to exactly what duties will be required of her. For a family with one servant, the following is a list of such duties; it should be written out for her, possibly given to her so that she can read it over and understand it at all times.

Build her own fires
Take out kitchen ashes
Do all the cooking
Wait on the table
Wash all the dishes
Sweep the first floor each day
Dust the first floor each day
Keep the water closets clean
Take care of guest's room
Take care of all rooms when mistress of house is sick in bed
Churn the milk, etc.
Milk the cow
Begin at ??
Quit after supper dishes are washed
Afternoons off Sunday
Afternoons off one week day
One day off each month

If a family has two servants, a cook and a maid, each should understand thoroughly how their duties and wages change during temporary absence of the other. It is not always advisable to change the wages of one during absence of the other, but sometimes it can be done with advantage. With a cook and a maid, their duties should be:

COOK

Build her own fires
Take out kitchen ashes
Do all the cooking
Do all the work for cooking
Wash the kitchen utensils
Wash all kitchen cloths, etc.
Help maid on family laundry
Churn the milk
Begin at ??
Quit after supper dishes are washed
Afternoons off Sunday
Afternoons off one week day
One day off each month

MAID

Build house fires
Take out house ashes
Wait on table
Wash dining room dishes
Sweep first floor each day
Dust first floor each day
Keep the water closets clean
Straighten up rooms second floor each day
Sweep and dust rooms second floor once each week
Sweep and dust staircase once each week
Wait on guests
Answer door bell
Milk the cow
Put coal in furnace during day
Help cook with laundry
Keep grounds in shape
Begin at ?? (later than cook)

Quit at 9 o'clock
Afternoons off Sunday
Afternoons off one week day (not same as cook's)
One day off each month (not same as cook's)

If the two servants are a cook and a man servant who is present all day, the cook should thoroughly understand that if the man servant leaves temporarily or permanently, her duties will be that of one servant as listed above. With both cook and man servant, the duties of each should be:

Cook	Man
Do all the cooking	Build kitchen fires
Do all the work for cooking	Take out kitchen ashes
Wash the kitchen utensils	Build house fires
Wash all kitchen cloths, etc.	Take out house ashes
Do family laundry	Attend to furnace
Take care of female guest's room	Wait on table
Take care of women's rooms	Wash dining room dishes
Churn the milk	Sweep first floor each day
Begin at ??	Dust first floor each day
Quit after supper dishes are washed	Keep the water closets clean
Afternoons off Sunday	Take care of male guest's room
Afternoons off one week day	Take care of men's rooms
One day off each month	Answer door bell
	Milk the cow
	Keep grounds in shape
	Begin at ?? (earlier than cook)
	Quit after supper dishes are washed
	Afternoons off Sunday
	Afternoons off one week day (not same as cook)
	One day off each month (not same as cook)

WAGES

The scale of wages is very different in different sections of the country. Payment is generally made by the week. Considering amount of work and care and intelligence in saving, it is about true that the amount of work done is about the same for each dollar of wages. For example, a Chinaman will ask about $12.00 a week and will do about four times as much work as a negro woman who will work for $3.00 a week.

The weekly scale of wages is about as follows:

	One servant	Two servants		Man
		Cook	Maid	
New York City	$7.00	$7.50	$5.00	$7.50
New York farms	5.00	5.00	3.50	Can't get
Atlanta	5.00	5.50	3.50	4.00
Georgia farms	3.00	3.50	1.50	3.00
Chicago	8.00	8.50	5.50	8.00
Illinois farms	5.50	5.50	3.50	Can't get
Seattle	8.50	9.00	6.00	10.00
California farms	9.00	9.00	5.00	Can't get

There should be some understanding, also preferably written, that crockery, etc., broken should be replaced in accordance with a previous agreement. It has been found a good rule to make the servant pay half of the original cost of articles broken.

Also, the question of guests gives great trouble. Many husbands and wives are actually unable to invite guests to their homes, for fear that the servants will leave. In this case, the servants really rule the house. In order to settle this matter satisfactorily to all concerned, I have found it a good rule to allow each servant twenty-five cents extra each day or part of a day, or $1.00 a week, for each guest. This is really a survival of the European custom whereby the guest gives a tip to the servants. As this is not the custom in America, the foregoing scheme has answered the same purpose; that is, made the servant willing and sometimes pleased when a guest comes.

ADVICE

This HANDBOOK is not filled with advice. It is a compilation of facts. However, there are so few wives who know how to treat their servants that I am impelled to give a little advice.

Do not gossip with your servants. This gives them a very low opinion of you.

Do not discuss private matters before them. Invariably, they get the wrong impression of the actual facts, and you learn that your neighbors have very peculiar information furnished them concerning your family.

Do not meddle with their morals. Give them no advice on the subject. Do not inquire into these matters. If you learn bad things concerning them, find out from them if these things are true; if so, discharge them.

Do not meddle with them at all. Do not assume the position of a parent; they do not want it, and resent it. If they are unable to take care of themselves, get other servants who can do so. The servant wants to be independent. The day has passed when the mistress was responsible for the servant. At present, the servant is not a slave; she is a party to an agreement by which she promises to do a certain amount of work for a certain amount of wages, is furnished food and shelter during this time, and can do just as she pleases away from the house.

Do not meddle with her room. Provide the following furniture:

1 lamp or other light
1 small bed, mattress, etc.
1 chair
1 small table
1 large cheap rug, if necessary
1 mirror
1 waste basket
1 chest of drawers
1 washstand, basin, pitcher, etc.

Inspect this room once a week to see that it is kept fairly clean and sanitary. If not so kept, the servant should be discharged, as such a servant will not keep a house or food or anything else clean.

Endeavor to lighten their work as much as possible. They will know it and will appreciate it. If in a city where electricity is available, it will generally save money in fuel, or at any rate, in time, work and worry, to use electrical stoves and other appliances as described in the subject on Cooking. A servant will work for less money for a family that has such conveniences. Likewise there is less probability of dirt, dust, coal, etc., being present in the kitchen or in the food.

Provide electrical or mechanical carpet sweepers for the rooms. It is a mistake to believe that they wear out the carpets or curtains. They save them. The old method of sweeping hard and raising a dust is useful as exercise for the servant, but not nearly so effective in removing the dust.

Do not always keep the servant in the house when there is no work to be done. If there are amusements, sometimes buy them tickets. Don't do this too often; it makes them servile, or spoils them.

If the family is to be absent from the house for some time, lock up the valuables; do not leave them as a temptation, even for servants known to be honest. Also pay servants half wages while absent, and require nothing further from them than a daily inspection of the house to see that it is in good order. Pay them these wages at the end of the first week or first month after return.

CHAPTER IV

CLOTHING

General Remarks. It is useless to discuss clothing in great detail. All women know enough about the cost and material of fabrics. This chapter brings out points which are not commonly understood about all clothing; also contains some useful facts about male clothing.

HYGIENE

As far as comfort and health are concerned, the clothing worn should prevent too great cold in winter and too great heat in summer. The body may acquire heat by absorption from the sun's rays or by generation in itself; it may become cool by absorption of cold or by evaporation of perspiration.

Winter: In winter the body should acquire heat. The sun's rays contain heat, and this heat is absorbed most by black cloth, nearly as much by blue, and least by white cloth. Therefore dark outer clothing is suitable for winter.

The heat of the body is conducted least by wool, more by silk, and most by cotton and linen. Therefore, woolen cloth is suitable for winter underclothing.

Perspiration after exercise is absorbed best by wool, next by silk and least by cotton and linen. As the cooling of the body by evaporation after exercise continues after the material is wetted, it is evident that woolen clothing is best for winter because it absorbs a large amount of perspiration and is not so apt to force the body to cool itself by evaporation of excessive unabsorbed moisture.

Summer: In summer, the body should not acquire heat. As the heat of the sun's rays are least absorbed by light colored clothing, it is evident that white or similar outer clothing is best for summer. Even a thin white drapery over a dark cloth will materially reduce the temperature.

The heat of the body is conducted best by cotton or linen; hence it would seem that these would be best for summer wear. However, there is the disadvantage that after exercise so little moisture is absorbed by cotton and linen that very soon all fresh moisture will be evaporated, which is done so quickly that the body

is chilled. On the contrary, it is evaporated so poorly by woolens, that combined with outside summer heat, the temperature is uncomfortable. The same rule applies in case the person is wetted by rain. The water may be wrung from the clothing; but so much remains in linen or cotton that the body is chilled by evaporation, while woolens have power to absorb more after being wrung out and consequently the body is not chilled by evaporation.

At any rate, a laborer should wear a gauze cotton undershirt and a woolen overshirt in summer; an office man of woman may wear a gauze cotton undershirt or waist, but after exercise, the body should be covered by a silk or flannel shirt or sweater.

CLOTHING TABLE

WINTER	SUMMER
Office Man	*Office Man*
Woolen Underwear	Gauze Underwear
Cotton or Linen Outer Shirt	Cotton or Linen Outer Shirt
Dark Suit	Light Colored Suit
Woolen Socks	Cotton or Silk Socks
Laborer	*Laborer*
Woolen Underwear	Gauze Underwear
Woolen Outer Shirt	Woolen Outer Shirt
Dark Suit	Light Colored Suit
Woolen Socks	Cotton or Woolen Socks
Woman	*Woman*
Woolen or Silk Underwear	Gauze Underwear
Cotton, Linen or Silk Waist	Cotton, Linen or Silk Waist
Dark Suit	Light Colored Suit
Woolen or Silk Stockings	Cotton or Silk stockings

Shoes: It is hardly worth stating that generally the shoes of women are too narrow and too small, though often fully long enough. Many shoe manufacturers have tried to conceal the numbers of their shoes by special numbering, so that the shoe clerk may deceive the woman and properly fit her foot. One large manufacturer uses the following system of numbering: 1st figure gives the half size or not, 2nd figure gives the number, 3rd figure gives the width: thus 243=4½ C, 143=4 C, 234=3½ D. Unfortunately, this does not work very well, because nearly all shoe clerks insist upon full or too great length; whereas they should insist upon full or too great width. If the woman knows the

number that fits her, she should insist upon it. If not, she should never accept a shoe without standing up and walking several paces to see if the shoe is wide enough. This is particularly important, because the foot expands about one eighth of its width when bearing the weight of the body; and the shoe is to be worn bearing the weight of the body.

SELECTION OF CLOTHING

In view of the many bargain sales, some easy method of determining pure woolen or silk clothes would be valuable; but experts are unable to do so except after severe tests. By comparison with similar material in hand, a fair estimate can be made.

The rule to buy only the best is a good rule; but there are a few articles of the best interspersed in these bargain sales along with many poorer articles, and bargains may be secured.

Closer woven cloth is generally of better quality and wears better.

Cheap shoes are made of old or improperly tanned leather. A good shoe lasts more than twice as long as a cheap shoe of half the price.

CLEANING AND DYEING

Dry cleaning means cleaning without water. It is used for costumes, evening gowns, tea gowns, blouses, furs, gloves, fancy shoes, laces, parasols, hats; children's frocks and suits; men's suits, fancy vests, ties, gloves; household velvet, cloth, etc., curtains, cushion covers, carpets, rugs, etc.

Dry cleaning does not mean cleaning without liquid; it means cleaning without water. The material is immersed in either petroleum benzine, benzol, carbon tetrachloride, or something similar which does not affect the material but removes the grease which holds the dirt; the dirt is then removed mechanically. Machinery is employed to clean a whole garment, but single stains may be cleaned with a rag and the special preparation as named below:

Grease, oil, wax	use benzine, benzol, ether
Paint, enamel, varnish	" ether, nitrobenzine, chloroform, carbon tetrachloride
Sealing wax	" Methylated spirit
Tar, pitch	" benzine, benzol, ether
Blood	" water followed by neutral soap in methylated spirit

Sugar, glue, etc.	use water
Grass	" ether, alcohol
Ink, iron rust	" oxalic acid
Fruit	" boiling water, poured on
Wine	" cover with salt for few minutes, then rinse in cold water

To clean straw hats, rub with bread crumbs; to bleach, use lemon juice.

Wet cleaning is used for lace curtains, net curtains, and other cotton or linen goods not injured by water.

Dyeing: Practically all articles may now be dyed, and the dyes will not run. If properly done, the material will not be injured. Often it is necessary to wear a drapery over dyed cloth in order to disguise the fact that it has been dyed, for this can be detected by some people.

It is generally impossible to dye a material a lighter color, though sometimes the material may be bleached and re-dyed lighter.

Thus red may be dyed black, but not yellow, grey may be dyed black, but not light blue, light blue may be dyed dark blue, but not pink.

Finishing simply consists in re-shaping, ironing, etc., the material after it has been removed from the liquid and dyed.

For more detailed information, see *Dyeing and Cleaning,* Farrell, price $1.75.

STORING CLOTHING, FURS, ETC.

There are two prime considerations: 1st, to keep away the mother moth so that she will not lay eggs in the material; 2nd, before storing, to get rid of any eggs already laid in the material.

The mother moth will not come into the sun, will not come near camphor balls (tobacco and strong cedar are not always effective), and cannot go through strong paper. The moth's eggs are not killed by odors, and the hatched moth lives long enough to do some damage, but the eggs may be shaken out, dusted out, or killed by a hot iron.

Clothes; Shawls, Blankets, etc. Sun for at least two days; shake and dust well; brush several times thoroughly; seal with camphor balls in fibre bag, paper bag or bag made of newspapers pasted together. For ordinary materials, it will be sufficient to pack in trunk with moth balls after sunning and brushing thoroughly.

Rugs, Carpets, etc. Sun; beat; iron moth-eaten places; spray with black pepper tea; pack away with camphor balls; in addition, seal the finest rugs.

Furs: Sun; comb; brush several times for at least a week; seal in paper; place in fibre bag; seal bag; hang up.

SEWING

Equipment: Preferably have a sewing room; at any rate, assign a place for spring and fall sewing. A small separate room is better than more space in a larger bedroom. Place sewing machine so that light will come from operator's left. Hang from a chair on right side a set of hanging pockets, and mark each pocket plainly with what it holds, say "Needles", "White Cotton No...", "Buttons", etc. Place on left a cutting table. The room should also contain a chiffonier or chest of drawers for the different cloths; and the machine itself should contain shears, small scissors, 3 tape-measures, 6 thimbles. There should also be a scrap basket, an iron, and a press board covered with flannel.

For any extensive sewing, a work basket is more trouble than it is worth; hanging pockets are more convenient and should be the first requisite of the equipment, the rest of which should be bought when money is available.

Patching: Cut a patch large enough; place under rent so that threads will run in same way as an original cloth; turn under raw edges and stitch them down; turn over, cut out rent, leaving half inch margin; cut margin at corners, stitch them down.

Darning: Baste hole firmly over waxed linen; then with fine needle and ravellings of same stuff, go back and forth, letting thread touch, until hole is covered. Take up the stitches at each end in a straight line. Weave other threads across first threads, going under one, over another, under next, as was the case with the threads in original cloth.

To darn cloth, lay torn edges so that they will touch, follow same method as above, using fine needle and thread matching cloth. Cut out the jagged threads when darning is completed.

Colors Suited to Different types, Blonde or Brunette

It is difficult to decide positively as to what colors will be most suitable for any particular person. This is largely a question of

educated taste; the person herself can best determine this matter. The following tables will be found useful at first. For best results, she should keep samples and descriptions of former dresses which were particularly suitable or unsuitable, and depend less and less upon these tables as she acquires more experience.

The tables are copied nearly verbatim from the *Ladies' Home Journal:*

COLORS SUITABLE TO BLONDE OR BRUNETTE TYPES

	White	Black	Gray	Yellow	Brown	Red	Pink	Violet	Blue	Green
Blonde Types Flaxen or Golden Hair, Blue Eyes, Fair Complexion, Faint Coloring in Cheeks.	Good; especially cream white.	Good; especially black with dull finish.	Good in blue tones.	To be avoided except in pale tints.	Good in neutral or dull shades.	To be avoided in all hues.	To be avoided except in pale tints.	Good; red purple to be avoided.	Good in hues inclining to green, gray.	Good; especially in soft pale tints.
Light of Golden Brown Hair, Blue or Gray Eyes, Stronger Coloring.	Good, may wear blue white.	Good; especially in combination with color.	Good in bluish or warm hues	To be avoided.	May be worn in most shades.	May be worn in clear transparent fabrics.	Pale tints and rose pink good.	Good; most shades may be worn.	Good in all soft or light tints.	Good in most shades.
Red Hair, Blue Eyes, Fair Skin With Color.	Good; especially cream white.	Very good; especially in transparent fabrics.	Good in nearly all shades.	Gold and amber shades good.	Good in nearly all shades.	To be avoided; touch of claret or maroon sometimes good.	To be avoided touch of rose color can be worn.	To be avoided except in combination with other colors.	To be avoided in all shades.	Good in all but very bright tints.
Sandy or Drab Hair, Blue or Gray Eyes, Sallow Complexion.	Good; especially in cream white.	Good, in combination with white or colors.	Good in combination with colors.	To be avoided except in shades of amber and gold.	Good only in combination with other colors.	To be avoided except in very dull shades.	Some warm shades of pink may be worn.	To be avoided.	To be avoided except in soft or dark shades.	Good only in solft shales inclining to blue.
Red or Auburn Hair, Brown Eyes, Warm Complexion.	Cream white good.	Good, only in combination with color.	Good only in warm shades.	Deep shades of amber or gold good.	Warm and deep shades good.	Hollyhock and deep warm shades good.	Touch of rose color can be worn.	To be avoided; red, purple good.	Good only deep shades, navy.	Olive and brown hues good.
Brunette Types Black Hair, Black or Brown Eyes, Rich Complexion.	Good in cream white.	Good; especially with touches of color.	To be avoided in most shades.	Soft shades, amber, etc., good.	Warm deep brown good.	Claret and deep shades good.	Pale tints to be avoided; flame color good.	To be avoided; red, purple good.	Good in rich, deep tones.	To be avoided except in clear positive tones.
Black or Dark Brown Hair, Brown or Gray Eyes, Sallow Complexion.	Transparent and soft white good.	Good; transparent black or in combination with color.	Good in most shades	To be avoided.	Neutral or grayish browns sometimes good.	Deep reds very good.	All pale shades to be avoided; rose or flame good.	To be avoided.	Good only in deep shades, navy.	Clear tones of green sometimes good.
Dark Brown or Black Hair, Blue or Gray Eyes, Fair Complexion with Color.	Good, both in cream and blue white	Good; especially in material having a luster.	Good in all bluish hues	To be avoided.	To be avoived. in most shades.	Cardinal and clear reds good.	Shell pink and pale shades good.	Violet and most purple shades good.	Good in nearly all shades.	Good; especGood; especially in clear
Golden or Light Brown Hair, Brown Eyes, Warm Coloring.	Good in cream white.	To be avoided except in combination with color.	To be avoided except in very warm tones.	Good; especially amber and gold color.	Good in all warm tones.	Good; especially in hues inclining to yellow.	Rose pink good.	Good; most shades of purple can be worn.	All warm shades of blue are good.	To be avoided except in full, warm tones.

COLORS THAT LOOK WELL TOGETHER

Combination of	White	Black	Gray	Yellow	Brown	Red	Pink	Blue	Violet	Green
Blue	Harmonious	Harmonious	Cold	Harmonious	Harmonious	Dull	Difficult	Negative	Weak	Harmonious but difficult
French Blue	Harmonious	Harmonious	Weak	Harmonious	Harmonious	Bad	Bad	Weak	Harmonious	Difficult
Pale Blue	Harmonious	Harmonious	Weak	Harmonious	Harmonious	Bad	Harmonious	Weak	Harmonious	Harmonious
Navy	Harmonious	Dull	Cold	Harmonious	Harmonious	Harmonious	Difficult	Weak	Harmonious	Harmonious
Light Green	Cold	Dull	Cold	Harmonious	Harmonious	Perfect	Harmonious but difficult	Weak	Harmonious	Negative
Dark Green	Cold	Dull	Dull	Harmonious	Dull	Harmonious	Difficult	Dull	Harmonious	Negative
Violet	Harmonious	Harmonious	Harmonious	Harmonious	Harmonious	Bad	Harmonious	Weak	Negative	Harmonious but difficult
Red Purple	Cold	Dull	Harmonious	Bad	Harmonious	Harmonious	Harmonious but difficult	Bad	Bad	Harmonious but difficult
Red	Harmonious	Harmonious	Harmonious	Strong	Harmonious	Negative	Weak	Dull	Bad	Perfect
Pink	Harmonious	Dull	Harmonious	Difficult	Dull	Weak	Negative	Harmonious	Difficult	Harmonious
Magenta	Strong	Harmonious	Harmonious	Bad	Harmonious	Bad	Bad	Strong	Bad	Harmonious but difficult
Wine	Harmonious	Dull	Harmonious	Harmonious but difficult	Dull	Bad	Weak	Harmonious	Difficult	Harmonious but difficult
Yellow	Weak	Strong	Harmonious	Negative	Harmonious	Strong	Difficult	Perfect	Harmonious	Harmonious but difficult
Orange	Harmonious	Strong	Harmonious	Poor	Harmonious	Strong	Bad	Harmonious	Perfect	Harmonious but difficult
Taupe	Weak	Dull	Dull	Harmonious	Negative	Harmonious	Harmonious	Harmonious	Weak	Harmonious
Brown	Weak	Dull	Dull	Harmonious	Negative	Harmonious	Dull	Harmonious	Harmonious	Harmonious
Black	Perfect	Negative	Dull	Strong	Dull	Harmonious	Dull	Harmonious	Harmonious	Dull
White	Negative	Perfect	Cold	Weak	Weak	Harmonious	Harmonious	Harmonious	Harmonious	Cold
Gray	Cold	Dull	Negative	Harmonious	Dull	Harmonious	Harmonious	Cold	Harmonious	Cold

CHAPTER V

FURNITURE

General Remarks. It is not intended in this chapter to describe the various changing fads and fancies in furniture. These are so constantly changing that it is impossible to keep up with them; and they are generally useless. About half of the furniture in the modern house is useless, unsightly, and expensive.

Nor is it true of furniture, as of many other things, that the most expensive is the cheapest in the long run as regards wearing qualities. It is probable that mission furniture wears as long and retains its beauty longer, yet it is comparatively inexpensive compared with mahogany, maple, etc.

Recently, the sanitary education of the people of this country has progressed very rapidly. No longer do we see the old carpets, filled with dust and germs of all diseases. They have given place to clean and neat rugs. The bathroom of our ancestors resembled nothing so much as a storehouse for rags, bottles, and toilet articles. It resembled a drug store and a stable. As now furnished, the bathroom is provided with a basket for soiled towels; a small closed cabinet for toilet articles; and face towels about the size of a handkerchief, a fresh one being used by each person.

No list is furnished of the costs of various articles of furniture. There is such a variety that such lists would be useless. Catalogues can be obtained, free, by simply writing to Sears, Roebuck & Co., Chicago, or Montgomery, Ward & Co., Chicago; these catalogues contain the cheapest and also very good qualities.

HISTORY

From the earliest periods, human beings have endeavored to improve the appearance and comfort of their houses by furniture. In the British Museum in London, there are certain old Egyptian chairs which are the same height and more or less similar to those of the present day. In the item of chairs, it is possible to distinguish some forty different styles: Egyptian, Grecian, Roman, Pompeian, Byzantine, Gothic, Moorish, Indian, Chinese, Japanese, Italian Gothic, Tudor Renaissance 15th, 16th, and 17th Centuries, Spanish Renaissance, Dutch Renaissance, German Ren-

aissance, Francois, Henry II, Louis XIII, Elizabethan, Jacobean, William and Mary, Queen Anne, Louis XIV, Georgian, Chippendale, Louis XV, Hepplewhite, Louis XVI, Sheraton, R. & J. Adam, Empire, British New Art, L'Art Nouveau, Modern Austrian, Scotch New Art, Arts & Crafts, Mission.

These are not all entirely distinct in every way; but a complete education in furniture requires a knowledge of the different styles. Many books have been written about them. It is impossible to attempt to describe shortly these various styles; but it would be well to remember a few points, which are more or less distinctive of each style but not necessarily limited to that particular style.

Egyptian: Legs of animals; couches take form of an animal; lines similar to all Egyptian art.

Pompeian: Combination in detail of Greek and Roman; exquisite, soft colors; fluted columns; dignified.

Gothic: Pointed style, with special reference to church architecture; furniture of same general character, either in pointed form like spires, organs, etc., or with carving to represent this form; chairs like choir stalls, chests like altars.

Renaissance: Luxurious finish; most elaborate carving; acanthus leaves on columns, legs, etc.; minute details; applied especially to beds, coffins, and chests; used also in embroideries, friezes, etc.

Louis XIV: Similar to Renaissance, but more dainty, less elaborate; legs of furniture generally curved; more elaborate inlay work; tapestries; heavy curtains; luxurious, heavily cushioned chairs. Large mirrors generally introduced.

Louis XV &XVI: Still less luxurious; principally noted for the bare effect on the rooms; much gilt.

Empire: No gilt; natural finish, veneering actually preferred to solid material; back legs of chairs curved slightly outward; constant use of bay wreaths, Roman fasces, letter "N".

Elizabethan: Renaissance reduced by English simplicity; less accurate and less elaborate carving; more heavy columns.

Chippendale: An American furniture maker who published a book of designs in 1754; less carving; used many types, adapting them to various purposes; used ball and claw foot from the Chinese; grandfather clocks; bedposts comparatively slender with little adornment; beauty of proportion carefully studied.

Mission: Modern; absolutely unadorned; generally dark, unpolished finish; straight lines preferred.

For more detailed information, see *Dying and Cleaning,* Farrell, price C. Candee, price $2.00.

TABLES OF NECESSARY FURNITURE

The following tables include all of the necessary articles, and some not absolutely necessary articles of furniture:

Front Porch
- Wooden settee
- Chair, wicker
- Chair, straight
- Hammock or swing
- Door mat

Hall
- Hat rack
- Rugs
- Umbrella stand
- Stair carpet
- Chairs (?)

Parlor
- Divan
- 2 sofa pillows
- Rocker
- Arm chair
- 2 chairs, straight
- Rugs, small
- Table, small
- Lamp or other light
- Window shades
- Window curtains

Library
- Rocker
- Book cases
- Office desk, ink, etc.
- Lamp or other light
- Davenport or couch
- Waste basket

Bedroom
- Dresser, with mirror
- Chiffonier, no mirror
- 2 chairs, straight
- Bed and springs
- Mattress
- 2 pillows
- 4 pillow cases
- 4 sheets
- 2 blankets
- Comforter
- 1 rug 9′ x 12′, or several small rugs
- Lamp or other light
- Window shades
- Window curtains
- Waste basket
- Washstand, if no waterworks
  - 2 towels
  - Pitcher
  - Bowl
  - Soapstand
  - Soap
  - Slop jar

Dining Room
- Dining table (extension)
- Small side table
- Sideboard
- China cabinet
- 6 chairs
- Rug 9′ x 12′
- Lamp or other light
- 4 tablecloths
- 12 table napkins
- Window shades
- Window curtains
- Crockery (see chapter on cooking)

Bathroom
- 2 bath towels
- 2 face towels
- Soap holder
- Soap
- Toilet cabinet
- Bath mat
- Toilet paper
- Large wicker basket, with closed top, for soiled towels

Servant's Room
- Small bed
- Mattress
- Pillow
- 2 pillow cases
- 2 sheets
- 2 blankets
- 1 comforter
- Chair, straight
- Small table
- Large cheap rug
- Mirror
- Chiffonier
- Waste basket
- Lamp or other light
- Washstand, if no waterworks
  - 2 towels
  - Pitcher
  - Bowl
  - Soapstand
  - Soap
  - Slop jar

Guest Room
- Dresser, with mirror
- Chiffonier, no mirror
- Washstand, if no waterworks
  - 3 towels
  - Pitcher
  - Bowl
  - Soapstand
  - Soap
  - Slop jar
  - Vessel
- Chair, straight
- Chair, rocker
- Bed and springs
- Mattress
- 2 pillows
- 4 pillow cases
- 4 sheets
- 2 blankets
- Comforter
- Couch, sometimes
- Rug 9′ x 12′, or several small rugs
- Lamp or other light
- Window shades
- Window curtains
- Pitcher of drinking water
- Drinking glass
- Waste basket

Back Porch
- Lawn mower
- Broom
- Carpet sweeper
- Floor mop
- Bathroom mop
- Door mat
- Polishing materials
- Coal or wood box

Cellar
- Garden tools
- Tool box containing
  - Hammer
  - Tackhammer
  - Hatchet
  - Handsaw, fine
  - Screwdriver
  - Monkey wrench
  - Handy man (brace, bits)
  - Pliers
  - Wire nippers
  - Foot rule
  - Square
  - Small plane
  - Nails, 4 & 8 penny
  - Screws, ½″, 1″, 2″

Cellar

Light bolts
Screw hooks
Picture hooks
Picture wire
Sandpaper
Putty
Le Page's glue

SELECTION

The principal furniture woods are, in order of importance, oak, pine, mahogany, birch, cypress. Other woods are cedar, maple, hickory, ash, cherry, walnut. Lately, steel furniture is used, especially in offices where the cost is not so carefully considered.

Wood rots either because of outside moisture, or because of inside sap, etc., remaining after improper seasoning. As all furniture is fairly well seasoned, the question of rot need not be considered.

Shrinking is that quality of wood whereby it expands or contracts. When the air is laden with moisture, the wood cells take up water and expand; they lose it upon contracting. If furniture is well seasoned and well painted or varnished, the amount of this expansion and contraction is very small. Hence, it is always best to purchase furniture which is not strictly new. Much of the cheap furniture is made before thorough seasoning. Proper seasoning is expensive, and cheap furniture cannot be properly seasoned. One of the advantages of antique furniture lies in the fact that, after its many years, there will be practically no expansion or contraction.

Sawing may be either quarter or plain. In quarter sawing, the log is cut into fourths and the boards are sawed from the sides alternately. In plain sawing, the boards are sawed across the full width of the log, being widest at the center of the log. Quarter-sawed boards do not warp or twist as much as the plain sawed, because boards shrink in the direction of the annual rings and these are perpendicular to the face in quarter-sawed boards. In other words, quarter-sawed boards are better, and cost more.

Leather: There are three grades of leather used in furniture making, Nos. 1, 2, and 3. No. 1 being the best and most expensive. There are also several grades of imitation leather, each being made with a cloth fabric in the back and coated with leatheroid (imitation leather). These imitation leathers are much cheaper than the true article, and the best qualities can hardly be distinguished

from the real leather. As the imitation is very much cheaper, it is often advisable to buy imitation. Its wearing qualities are not as good; but in general, the real leather will have a worn appearance and require renewing in the same length of time that the imitation leather will be so worn out that it must be renewed. The mail order houses always give true descriptions of the articles for sale, and a careful reading of the descriptions will show if the articles are real or imitation leather.

Beds: Wood beds are gradually being displaced by metal beds. In Europe, there are very few wood beds. The metal beds are far preferable, because they cost very little more, can be more easily cleaned and repaired, and furnish absolutely no refuge for vermin.

Iron beds are generally finished in enamel, white being the usual color. Brass beds cost about three times as much as iron beds, but are much handsomer. The square tubed iron bed, or the square tubed brass bed in dull finish, are believed to present the best appearance and furnish the best service for the money.

Rugs: Carpets are being displaced by rugs. If it is desired to cover the whole floor, it is possible to make a carpet with an outer border of suitable pattern; and this can be placed as a very large rug; it is called a carpet rug.

The usual commercial sizes of rugs are 18″ x 36″, 27″ x 54″, 30″ x 60″, 36″ x 72″, 6′ x 9′, 7½′ x 9′, 9′ x 9′, 9′ x 10½′, 9′ x 12′, 10½′ x 12′, 12′ x 12′, 12′ x 15′.

As a rule, the larger rugs have seams, being composed of several widths and a border sewed together; but it is possible to pay a little more and buy seamless rugs in the large sizes. Rugs with seams quickly show wear at the seams. The oriental rugs are better and wear better than other rugs; likewise they cost more. They are even worth the increased cost; but there are so many imitations that a very reliable dealer must be selected in buying these rugs.

Antiques: Apart from their historical value, antiques are never worth the money. It cannot even be said that they are made of solid material, because much of the furniture of a hundred or more years ago was considered superior in quality if it was veneered. Modern furniture of even approximately the same cost, is of better construction and wears longer. Besides, there is very

little chance of securing valuable antique furniture at a reasonable price. Nearly all of the so-called antiques are not antique at all; they are of recent manufacture by firms who make this special furniture.

Veneering: In order to improve the appearance of cheap furniture, and make it appear what it is not, a thin layer of more expensive and beautiful wood is glued on the outside of the cheaper material. This is called veneering, and it is often impossible to tell the difference. Of late, furniture dealers have adopted certain expressions, intended to deceive. For instance, *genuine* mahogany now means mahogany veneer, *solid* mahogany means real mahogany throughout. Veneered furniture wears well, and is generally worth the extra cost; but a purchaser should require a written guarantee that furniture is not veneer, if the price paid is that for solid furniture. Some people bore into the wood from the under side in order to determine if it is veneered. This is a good plan, but not always positive; for in the best veneering, the furniture is first stained the proper color, and this stain will often penetrate the wood to considerable depth. A cabinet maker can easily determine if there is veneering, and his services cost very little for the value received.

CARE OF FURNITURE: HOUSE CLEANING

In order to explain how to keep furniture in best polish, or restore same, it is necessary to explain the method of painting and polishing furniture. It is not necessary to name the ingredients needed to compound the various paints, varnishes, etc., because they can be purchased already mixed.

Paints, Varnishes, etc.: A paint consists of a body or *pigment,* such as red and white lead, red and brown oxide of iron, carbon-black, graphite, which is applied through being suspended or dissolved by a *vehicle* such as linseed oil or spirits of turpentine. Varnish similary consists of a body of gum or resin which is dissolved in oil and turpentine or alcohol as a vehicle. Shellac is varnish.

Stains are liquid preparations of different tints, applied to the surface of the cheaper woods, in order to give them the appearance of the more rare and expensive woods, such as mahogany, walnut, etc. The application of the stain is a separate operation and has no bearing on the further operations. A piece of cheap wood is

made to look somewhat like a more expensive wood, and the further treatment is exactly the same as if it were the more expensive wood in the beginning.

Fillers are of two kinds, paste and liquid. They are not a necessity, but are used to fill up the wood pores and thus give a smooth, level, non-absorbent surface, upon which the paint or varnish may be placed. Paste fillers are for use on coarse grained woods such as oak and chestnut; liquid fillers are for close grained woods such as Georgia pine. Liquid fillers are not always necessary, as the close grained wood absorbs little.

Operation of Painting or Varnishing: Go to a hardware dealer and select from his wood samples exactly the desired finish. The samples tell what paints or varnishes are necessary. Purchase the required brushes and cans of stain, filler, paint and varnish.

Sandpaper the wood smoothly, rub off all the particles, and if not to be painted, stain it one or two coats of the desired color; let dry for about 12 hours.

Apply the filler, liquid to pine, paste to oak, chestnut, etc.; let it stand for 24 hours, and rub smooth with No. 00 sandpaper; also rub the paste filler about 20 minutes after applied, as soon as it has entered and flattened, so that the extra paste may be rubbed off. The longer this is delayed, the harder it is to rub off the extra paste. Two coats of filler are generally needed. (The staining and filling are omitted in painting.) The final finish generally consists of say four coats of paint, two coats of wax, or about four coats of varnish. The painting coats are called; 1st the priming, then the two intermediate, and the final; each of these coats should dry about 24 hours. Similarly the wax should be applied in the paste form as it comes, rubbed briskly with a soft, dry cloth to polish, and left for 24 hours before the next coat is applied. Each coat of varnish should also dry for 24 hours and be rubbed with fine oil sandpaper before the next coat is applied.

Removing or Cleaning Old Paint: Dissolve two ounces of soft soap and four ounces of potash in boiling water; add ½ pound of quicklime; apply hot and leave for 12 to 24 hours. This will enable the old paint to be washed off with hot water, and is a neater and more rapid way than burning off, which is the customary way. To clean old paint, wash it with a solution of pearlash in water.

Quantities Needed: One pound of paint will cover about 30 square feet of wood with one coat: on brickwork, same. One gallon of prepared paint will cover about 300 square feet of wood with one coat.

One gallon of liquid filler will cover about 400 square feet of surface with one coat.

Stain, wax, hard oil finish; about the same as liquid filler.

Floors may be finished with a wax surface, in accordance with directions above, or covered with linoleum, or left plain.

It is now quite usual to stain the floor, and wax it only where the surface shows outside of the rug. Linoleum is made in beautiful patterns often almost exactly like a waxed floor; is cheaper than waxing, just as sanitary; and requires much less care. Linoleum costs from fifty cents to $2.00 per square yard.

Broken Furniture may be poorly repaired by glueing the parts together with Le Page's glue, tying them with a string until the glue is dry. To repair permanently, bore nail holes in both sides of the break, put glue in these holes, put in a nail or nails, cover the edges of the break with glue, press them together with nails inside, tying edges with a string until the glue is dry. The nails are necessary for permanent repair, because the glue has very little strength against a cross strain.

Scratches, etc.: Sandpaper the place lightly; stain it over again, if the sandpaper has worked it to a different color; apply filler, wax, or varnish as case may be, allowing each coat time to dry. Follow same plan as though the piece was being finished new, with the single difference that each coat should be spread a little farther than the preceding coat, so as to prevent the appearance of a well-marked line. In cases of very large scratches or patches, it may be best to sandpaper the whole surface and finish it all anew.

Dents may be raised by applying a wet towel and rubbing the towel with a hot iron. The steam will raise the dent. This may ruin the finish; if so, refinish the spot.

Wall Paper: Harmony should be secured in papering the walls, harmony in the paper, and harmony of the paper with the rest of the furniture in the room. Refer to the table of harmonious colors in the chapter on Clothing.

To give some idea of the cost of papering a room, the following table shows required rolls of paper and yards of border for various sized rooms.

Room	Height of Ceiling	Number of Doors	Number of Windows	Rolls of Paper	Yards of Border
7 x 9	8	1	1	6	11
8 x 10	9	1	1	8	12
9 x 11	9	1	1	10	14
10 x 12	9	1	1	10	15
11 x 12	10	2	2	10	16
12 x 15	10	2	2	12	18
14 x 16	12	2	2	17	20
14 x 18	12	2	2	19	22
15 x 16	10	2	2	15	21

A double roll of wall paper contains about 72 square feet, and costs from 10 cents to $1.00; the border paper costs from 3 cents to 50 cents per yard. Hanging of paper will cost about half as much as the paper. Paper may be hung by home talent, but requires a little care and judgment.

For more detailed information, see *A Handbook for Superintendents of Construction, Architects, Builders and Building Inspectors,* by Richey, price $4.00; also *Paint and Varnish Facts and Formulas,* Hoff, price $3.00; *Painters' Oils, Colours, and Varnishes,* Hasluck, price $1.00.

House Cleaning: Annual house cleaning is a necessity. Spring is the usual time. All of the rugs are taken up and beaten, the walls are cleaned, the light fixtures, moulding, etc. are cleaned. Also a daily cleaning of part of the house is necessary for proper sanitation.

Walls, woodwork, and wall paper are cleaned by a putty-like preparation called Smoky City Cleaner, price 10 cents per can. One can will clean all the walls or wall paper in one room. There are many similar preparations costing about the same price.

Rooms and rugs are best swept by a carpet sweeper, price about $3.00. Electric carpet sweepers are preferable, if electricity is available. Floors may be mopped with a wet rag; this being especially applicable to linoleum floors. Brooms are not in general use, as formerly; they stir up the dust, but do not remove it, as it settles down elsewhere in the same room.

Heavy curtains may be dusted with a vacuum cleaner, or shaken or dusted with a stick.

It is not desirable to sweep a room each day; nor is it necessary. In dusty cities it is best to dust the furniture each day. Feather dusters are not effective, and they scratch the furniture. Use a soft rag, moistened if necessary.

CHAPTER VI

MEDICINE

General Remarks. There is no attempt made in this chapter to take the place of a doctor. It is only desired to present herewith certain household facts that should be known by every wife. A fair knowledge of these facts will be of great benefit, will often prevent real distress, and will save money for the family.

It must be remembered by the wife that symptoms are very much alike; that the beginnings of a mild fever are very much the same as those of a serious fever. When sickness comes, the first reliefs should be administered; and then if there is a possibility of serious sickness, a doctor should be called, and the probable causes should be looked for and removed. For example, a slight fever is in itself nothing at all; but if a member of the family has a slight fever and at the same time other persons in the vicinity are sick with typhoid fever, it is possible that this may be typhoid fever. This is very apt to be the case if the water supply is known to be impure. In such cases, a doctor should be called in at once.

Doctor's visits are about $2.00 for a day visit, and $3.00 for a night visit. It is generally a mistake to try to save money by not sending for a doctor.

The action of the mind is of great importance in sickness. Christian Science has demonstrated this by its remarkable cures. If a sick person wants a certain doctor, it is probable that faith in this doctor will be of more real value in effecting a cure than slightly more suitable medicine prescribed by a more learned doctor. The necessity and value of medicines are generally overrated. Relief by medicine is generally temporary; the system must take care of itself. Careful nursing, removal of all hurtful influences, and complete rest for the sick person are about as good as medicines. So much is this the case, that doctors have been known to give bread pills with most satisfactory results. Especially is this true with persons who have acquired a habit of taking medicines, and are mentally unable to be well without medicine. Hysterics in persons are also only forms of mind sickness; bread pills are particularly satisfactory for hysterical persons.

However, mind has no effect on germs, broken limbs, etc. It is absurd to apply mental treatment to cholera, typhoid, or broken limbs.

In this chapter, the subject is treated under the following subjects:

Nursing: The wife can do the nursing, and is generally preferred. A trained nurse costs about $25.00 a week, and her board. Women have a natural ability in this line, and very little knowledge is required of a wife for ordinary nursing.

Medicine Chest: Various outfits of medicines are given, with cost of same. These are intended for prompt use in case of emergency, or for use in ordinary and unimportant sickness.

Causes of Some Diseases: Infectious diseases are diseases which are transmitted to the infected person from another person or animal already infected. In general, no treatment is prescribed, as these diseases are serious and require the services of a doctor. Of late years, due particularly to the efforts of Army surgeons, the causes of these infectious diseases have become known, and the avoidance of them is not at all difficult. There are also mentioned other diseases which are not infectious such as those of the digestion, circulation, etc.

Rules for Health: Certain simple rules are given which are advisable in order to prevent disease.

Home Treatment: This includes all treatment which can be permanent in minor ailments, no doctor being necessary; and also emergency treatment while awaiting the arrival of the doctor. It does not include an extended system of treatment in serious sickness.

Camping: This gives a few special rules for camping.

NURSING

Care of The Sick Room: The sick room should have sunshine, pure fresh air, and freedom from noise and odor.

The furniture should be plain; the wall paper and curtains should be of a subdued color and pattern and produce a soothing effect. The bed should be of iron, and the mattress should not be a soft feather mattress.

The mattress under a sick person should generally be covered with a rubber sheet; and over this placed the usual two sheets, blankets, etc. The object of the rubber sheet is to prevent damage

to the mattress; likewise, the patient will not need a new mattress very often.

To change the bed clothes: Warm the fresh sheets; roll the patient on one side; put on one lower fresh sheet half way, folding down the remainder; roll the patient over on the fresh sheet; remove the old sheet and tuck down the fresh one.

To change the personal clothes: Pull up over the shoulders, removing the arms last.

Noises should be avoided, especially in nervous cases. If you wish to speak to the patient, stand directly in front before speaking.

Heating and Ventilation: The room is best heated by an open fire. In cities, this is not always possible, but the advantage of the open fire is in its ventilation, so proper ventilation renders an open fire unnecessary. Ventilation should be such that all the air is changed twice a day. Tack cloth say 12 inches wide to top of top window, and to top of window sill; pull down window about 8 inches, letting the air through the cloth. Another way; raise the bottom window, filling the space with a board; the air will come through between the sashes of the two windows. About 80° is the proper temperature of a sick room, but this should be varied with different patients in order to make them satisfied and comfortable.

Care of The Patient: The same person should preferably always be in charge of important duties; the patient prefers it.

A patient should be lifted firmly; this applies especially to babies. Do not lift them as though you were afraid. To lift or raise the patient in bed, raise by hands under the arms and hips. Head rests should be made firm; pillows alone are very poor, they should preferably be supported on a stool or chair or a special rest.

If too much light for the patient, place a sheet over the window, or over the head of the bed if it is not solid.

Methods of Giving Baths; Temperature: In administering a sponge bath, the body should first be sponged rapidly with warm water about 80 degrees Fahr., followed by the bath of prescribed temperature. In typhoid fever, a sufficient number of persons should be present to hold the patient firmly. A full length tub is used; a rubber ring should be available to support the head, and a sheet to rest the shoulders. A sitz bath (hot or cold) con-

sists simply of sitting in the water; a blanket should be placed around the shoulders, legs, and feet.

The following are the temperatures for baths:

Cold	33-65 deg. Fahr.	Tepid	86-92 deg. Fahr.
Cool	66-74 " "	Warm	93-98 " "
Temperate	75-85 " "	Hot	99-112 " "

Bedsores: They are due to shutting off the circulation. They appear on bony prominences, or are due to wrinkles, crumbs, etc., in sheets. To avoid them, run the hand carefully over the sheet after each meal, and smooth out the wrinkles, take away the crumbs; toughen the skin by washing the bony parts with soap and water and rubbing two or three times a day with alcohol. Make a padded ring to protect the sore until healed.

Taking Temperature, Pulse, Respiration; Notes: The doctor wants to know the condition of the patient during his absence. The temperature is taken every hour in serious cases; at least once in the morning and once in the evening in all cases. If the doctor wants very accurate information, he will furnish blanks for charting the temperature and for other bedside notes, such as pulse, respiration, vomiting, bowels, sleep, etc.

The normal temperature for most persons is 98.4 degrees Fahr. Shake the thermometer down below 90 degrees before taking temperature; then put in patient's mouth, under the tongue; see that the mouth is kept closed, and leave about two minutes; some thermometers are slow registering, and take five minutes. Naturally, no hot or cold liquors should have just been in the mouth. If the patient cannot take the thermometer in the mouth, place under the armpit, and fold the arm down on it; leave at least five minutes.

Pulse and respiration are not reliable indicators of state of health; temperature only is reliable. Pulse can be counted by the finger tips placed on the thumb side of the wrist, the temple, the side of the neck, and the top of the foot. Count at least half a minute, and multiply by two.

Respiration is taken by watching the movements of the chest while it rises and falls. A complete rise and fall is called one respiration.

Medicines are generally given through the stomach; sometimes when in a hurry, by hypodermic syringe; sometimes, through inhaling or by atomizer.

Where the amount is to be measured, unless by drops or spoonfuls, a measuring glass is necessary.

Medicine should be given promptly; do not discuss it with the patient; just raise his head and give it. If the patient is partially unconscious, moistening the lips will attract attention and make him swallow.

Food: Liquid food can be administered in a glass, by a spoon, by a glass tube, or by feeding cup (like a cream pitcher) if the patient cannot raise his head.

Solid foods should be served in small quantities, a small amount assimilated being better than a large amount not assimilated. Beef juice is made by broiling a piece of round steak an inch thick for seven minutes, squeezing the juice into a hot cup with a lemon squeezer or something similar, and seasoning with salt and pepper.

To make bottled beef tea, chop fine a pound of beef free from fat and put into a large mouthed bottle; add half a pint of cold water; let it stand for an hour; then place the bottle in a saucepan of cold water, put on the fire, and cook for two hours at *almost* the boiling point; strain and season with salt.

To make bottled beef essence, follow above, omitting all water.

Frozen beef tea is made by placing cold beef tea in a small tin pail, surrounding it with crushed ice, letting set, scraping the hardened parts from the sides until it is all hard.

Broth; see chapter on Cooking.

Application of Heat and Cold by Poultices, Stupes, Packs, Ice Coil, etc.: Be careful that the heat is not too great, as it will burn the tissues (this is not uncommon with unskilled nurses), and not too cold, as it will freeze them if too long applied.

Poultices are made of equal parts of boiling water and flaxseed meal, or Indian meal, or even stale bread. The meal is stirred into the water, and the poultice is beaten from three to five minutes. It is then laid on muslin; covered on both sides by the muslin; a piece of cheese cloth or old mosquito netting placed over one side and folded back about one inch on the other side. The poultice is applied with the cheesecloth side next to the patient, and held by pins or cloth bands.

Mustard plaster is made same way as poultice with mustard instead of meal, except that tepid water is used, as boiling water destroys the efficacy of the mustard. Effect of mustard plaster should be closely watched, as it blisters the skin very quickly.

Stupes are best made of two thicknesses of old flannel. Put them in a towel, and pour water over all but the ends of the towel; wring out thoroughly until the flannel is very dry; then open and flap it two or three times in the air; cover with oil muslin or rubber, and apply every ten minutes or more depending upon the degree of heat required.

Dry heat can be obtained by hot water in rubber bags or bottles, by heated soapstone or brick, by bags filled with heated salt or sand; and by a new invention called the electric pad.

The hot pack consists simply in wrapping the patient in a blanket, or two blankets, wrung from water as hot as the hand can bear. An ice bag or cold wet towel should be applied to the head. The hot pack should not be kept on more than one hour.

The cold pack is similar to the hot pack, sheets being used wrung from water about 70 degrees Fahr.

The ice pack consists simply of two sheets around the body with chopped ice between them.

There are also ice coils for use around the body; chopped ice in rubber bags (called an ice bag); and iced cloths. Any application of cold to the forehead relieves intense pain in the head.

Infectious and Contagious Cases: All extra furniture must be removed from the room in which the patient is to be isolated. Two rooms are preferable for isolation, one being advantageous for disinfecting and other arrangements, or each may be used alternately for the patient.

The rooms should be at the top of the house. If other rooms on the same floor must be used, tack a sheet to the outer frame of door, this sheet being kept constantly wet with a mixture of 1 part glycerin to 6 parts two per cent carbolic acid solution [one teaspoon to ½ pint (1 glass) of water]. Two sheets should be used, one always soaking in the solution.

All articles used by the patient must be washable, or burned later. Toys, etc., should be burned as soon as not needed. All linen, clothes, etc., should be first washed by the attendant, then soaked six hours in strong carbolic acid solution (two teaspoons to a glass of water) and afterward boiled.

An open fire is especially useful for burning things. Fæcal matter and urine which cannot be burned if mixed with sawdust, should be allowed to stand one hour in a solution of six ounces

of chloride of lime to the gallon of water. It should not be thrown untreated in a water closet, as the germs are only carried by the sewer to form dangerous contamination elsewhere. After one hour in the above solution, the mixture can be thrown into a water closet or buried in a trench far from the source of water supply.

When allowed to leave isolation, the patient, hair also, should be bathed in a corrosive sublimate solution of 1 to 1,000 [1 tablet to 1 pint (two glasses) of water]. The body can then be enveloped in a clean sheet and the patient taken to another room.

Convalescents should not be allowed to indulge themselves to the extent of overexertion, overfeeding, or nervous excitement. Visitors should stay a short time only. The patient should not be allowed to sit up so long that he is fatigued.

Special Points: The mouth should be cleansed by listerine as a mouth wash, or by a swab made of absorbent cotton around a toothpick.

Thirst and nausea may be relieved by spoons of hot water at frequent intervals, or by small pieces of ice. Very little water should be given.

Fæces and urine should be noted, for information of doctor. In infectious diseases, they should be disposed of as stated above.

Sleeplessness, nervousness, restlessness, and general discomfort at night can often be overcome by a not too cool light sponge (if allowed), with water or alcohol; sometimes, a simple shaking up of the pillows and smoothing of the spread will often be sufficient. Do not give a hot or cold bath.

Dressings for wounds should be soaked off by an antiseptic solution. The wound should be washed by towels soaked in this solution. New dressings should be sterilized, and the hands of the nurse must also be frequently washed in the antiseptic solution. (see antiseptics)

The Dying and Dead: Very little can be done for the dying; he will naturally assume the most comfortable position. If he can swallow, a little brandy in hot water will help.

After death, hold up the chin by a bandage; comb the hair; if necessary, keep the eyelids closed by a tiny piece of thin moist paper; bathe the body; tie the ankles, knees, and wrists together;

tie a large sheet well filled with cotton batting around the hips. Place the body in a natural position, elevating the head a little.

To prevent decomposition, in case the undertaker will not arrive in twelve hours, place on the stomach a large flat pan filled with cracked ice.

MEDICINE CHEST

A medicine chest should be available in every family. All of the medicines and equipment needed for a medicine chest are sooner or later required by the family; and, if such a chest is at once provided, the same equipment and medicine may be saved for future use. As in many other things, a little system saves much expense.

Home treatment is generally not dangerous. The medicines used are rarely poisonous. However, there are a few poisons; and it should be a first requirement, that medicines whether in a chest or not, should be beyond the reach of children.

All poisons should have a little bell attached, so that there may be no possibility of mistake in the dark.

There is no difficulty in providing a suitable chest. Chests or cases for medicines are sold in all sizes varying from pocket cases up to chests the size of a trunk. Unfortunately, no one seems to have prescribed the medicines to be placed in the case. This is left for the patient or nurse; and these do not know.

In the tables below, I have enumerated the medicines which should preferably be included in the various sizes of cases. These medicines may be varied without any difficulty. Any druggist can put up these or any other medicines; the cases can be purchased, or home made substitutes are good enough.

The price named includes the medicines and the case described; cheaper cases can be purchased for less; the case is a great part of the cost. The directions will be written on each medicine.

The medicine chest should be examined on the first of each month, and used articles replaced.

Complete Family Medicines; no chest (use an old trunk that *has a lock*); cost $12.00.

Cloth bandage roll	Package safety pins
Gauze bandage roll	Bed pan
Spool adhesive plaster	Sponge
Package absorbent cotton	Dropper

Medicine glass
Glass (tumbler)
Thermometer
Hot water bag
Ice bag
Teaspoon
Package Soda
Can insect powder
Package moth balls
Scissors
Electric pocket light
Tablets or liquids in bottles
  Alum
  Arom. sp. ammonia
  Carbolic acid
  Cascarets
  Castor oil
  Chloride of lime
  Cold cream
  Corrosive sublimate
  Heroin tablets
  Ipecac
  Morphine (⅛ grain)
  Nitric acid
  Oil of cloves
  Permanganate of potash
  Phenacetin
  Quinine
  Sugar of lead
  Whiskey

Settler's or Camper's Medicine Case—Black Metal; Burroughs, Welcome & Co., price $10.50. 8¼ x 4⅜ x 5¾ in.

Gauze roll
Adhesive plaster
Safety pins
Absorbent cotton
Cloth roll
Electric pocket light
Cold cream
Tablets or liquids in bottles
  Carbolic acid
  Cascarets
  Castor oil
  Corrosive sublimate
  Heroin tablets
  Ipecac
  Morphine
  Oil of cloves
  Phenacetin
  Quinine
  Smelling salts
  Whiskey

Medicine Pocket Case—Morocco Leather; Burroughs, Welcome & Co., price $7.20. 6¾ x 4¼ x 1¼ in.

Compound tincture of chloroform and morphine
Cold cream
Small brush
Tablets or liquids in bottles
  Cascarets
  Heroin tablets
  Phenacetin
  Quinine
  Whiskey

CAUSES OF VARIOUS DISEASES

Appendicitis: Caused by infection of the appendix due to strain, overeating, or contagion; always comes on the right side.

Bubonic Plague: Caused by a germ carried by rats and fleas. Prevented by killing the rats and fleas.

Cholera: Caused by a germ taken into the stomach through infected water, or infected food. Prevented by boiling the water, and keeping flies away from food; kill the flies.

Diabetes: Caused by family predisposition; also by too much eating of rich food.

Diphtheria: Caused by a germ generally transmitted through some liquid. Prevented by antitoxin; isolating persons sick with it.

Dysentery: Caused generally by a germ taken into the mouth in unripe fruit. Prevented by more careful selection of food.

Gout: Caused by inheritance; by too much food and too little exercise; and by intoxicating drinks.

Malaria: Caused by a germ transmitted through a mosquito bite. Prevented by destroying the mosquitoes.

Measles: Caused probably by a germ carried through the air. Prevented by isolating persons sick with it.

Mumps: Cause unknown; probably transmitted through the air. Prevented by isolating persons sick with it.

Pneumonia: Caused by a germ transmitted through the air. The germ is generally effective only when the exposed person is already weak. Prevented by isolating persons sick with it.

Scarlet Fever: Cause unknown. Prevented by isolating persons sick with it.

Smallpox: Caused by a germ transmitted through the air, clothing or furniture. Prevented by isolating persons sick with it.

Tonsilitis: Caused by exposure to wet and cold.

Tuberculosis: Caused by a germ transmitted generally through the air. The lungs of the person infected must previously be weak. Avoid too close contact with persons sick with it.

Typhoid Fever: Caused by a germ in infected water, or food generally infected by flies. Prevented by boiling the water and killing the flies; also prevented by taking the typhoid serum.

Whooping Cough: Cause unknown; but conveyed by the breath, expectoration, atmosphere, and fabric. Prevented by isolating persons sick with it.

RULES FOR HEALTH

Antiseptics: These weaken and kill germs, and prevent further increase of germs. Antiseptic gauze and antiseptic cotton may be purchased, but an antiseptic solution must generally be homemade. In order of relative importance, the antiseptics are:

(a) Boiling water. Cheap; kills all germs of any kind when left in the boiling water for 15 minutes; used to disinfect surgical instruments.

(b) 1 to 1,000 solution of corrosive sublimate (also called mercury bichloride), 1 tablet in a pint (2 glasses) of water (it comes in tablets of 7½ grains). The most useful antiseptic, kills all germs of any kind, not necessary to boil the water; but burns a little, and very poisonous if taken internally.

(c) Two per cent solution of boric acid or common soda (1 teaspoon in 1 glass of water). Cheap; used with all wounds or cuts as it is strong enough to kill all pus germs or other ordinary germs; generally entirely satisfactory, if the water is first boiled to kill stronger germs; non-poisonous and absolutely harmless.

(d) Two per cent solution of carbolic acid (1 teaspoon in 1 glass of water). Stronger than boric acid; but poisonous and not so strong as corrosive sublimate.

Bathing: Bathe with soap once or twice a week. Use water of any temperature which will be comfortable. Finish with a cold shower if not too much shock. Each morning take a cold shower in order to make the blood circulate freely. Do not take a cold or warm bath at night; it induces sleeplessness.

Constipation: This is the result generally of irregular habits. The best time for relieving the bowels is in the morning immediately after rising. The bowels are very easily trained, and will quickly acquire the habit. Make an effort to relieve them each morning until the habit is natural. When pills are taken to move the bowels, take only such pills as are then necessary, and do not form the habit of taking pills all the time.

Eyes: Weakness of the eyes causes many other troubles, such as headache, stomach ache, etc. Never read in a bad light, in sunlight, or while on a train or street cars. Always stop when the eyes hurt, or when small spots appear before the eyes.

Exercise: A little exercise is better than no exercise and better than too much exercise. Walking is the best exercise; golf probably the next best; tennis is sometimes too strenuous. Do not exercise the muscles after the heart is fatigued and is beating rapidly; rarely will the muscles be fatigued.

Flies and Mosquitoes: These and water are the great germ carriers. The water can be rendered safe by boiling; and a mos-

quito net will afford limited protection from flies and mosquitoes, but they should be destroyed. Both must be destroyed at their breeding places.

Flies breed in the deposits from man and beast. The deposits in all privies should be absolutely fly-tight. A privy consists of two parts, the shelter and the seat. The seat should have holes in the top with covers always closed when seat is not in use. Earth (preferably sand) should be thrown in the hole after each use. The sides should be tightly sealed; the bottom may be of boards (so that privy need not be moved), or it may be a ditch opening only into the seat box (necessitating the removal of the privy and a new ditch when old ditch is filled). The privy should be located far from the house, and so that it will not drain into the well of drinking water.

Breeding places of flies in manure piles can be destroyed: 1st, by removing the manure; 2nd, by spraying it with a large quantity of an antiseptic solution, preferably two per cent carbolic acid [1 teaspoon to ½ pint (1 glass) of water]. This is very cheap and kills flies, eggs, etc.

Mosquitoes breed only in still fresh water. They fly only a very short distance. Cover all pools of water and marshy banks of creeks with a thin film of kerosene oil. Half a mile from the house will generally be sufficient.

Teeth: Keep the teeth in good shape; consult a dentist about once every three months, and have him repair them. Toothache should be followed by an immediate visit to the dentist. Tooth powders are generally good for cleaning the teeth, and should be used preferably before each meal, but at least once a day in the morning. Calox Tooth Powder is as good as any. Change brand of tooth powder about every two months.

Ventilation: Fresh air enthusiasts often make sad mistakes. Fresh air is very healthy, but the body should never be chilled. Take a walk, thoroughly wrapped in warm clothing; sleep under plenty of warm clothing; wrap up warmly after exercise. If the body becomes chilled, sickness will surely follow unless the body is quickly warmed and rubbed, and wrapped warmly.

This applies to any portion of the body, such as wet feet, wet hair, etc.

Water: Boil all the water in case there is danger from the water. This is best known by the diseases in the vicinity. If typhoid fever is prevalent, the water should surely be boiled. In cases of doubt, take the water to a physician for examination.

HOME TREATMENT

Practically all ordinary forms of sickness are named below, with description of symptoms, if necessary, and the treatment prescribed where no doctor is necessary or emergency treatment until the arrival of a doctor:

Appendicitis. Symptoms: Pain more or less severe on the right side low down, generally midway between the navel and the prominent bony part of the hip; sometimes a distinct swelling can be found. Treatment: Send for a doctor.

Appetite, Loss of: Due to too much eating, or other illness. Eat less, or find out the other cause of loss of appetite.

Billiousness. Symptoms: Sallow skin, foul breath, dullness. Treatment: Eat less; stop alcohol and tobacco; exercise actively or even violently.

Blood Poison. Symptoms: Fever and sometimes prostration in one to three days after infection. Treatment: Use antiseptic on the wound (see antiseptics) and then send for a doctor.

Boils: The best treatment is to open the boil early by a small cut, and thus let out the puss. The boil should be bathed often in hot boiled water. It is practically impossible to hasten the progress of a boil.

Broken Limbs: Send for a doctor.

Burns: For slight burns apply cold cream, or cloths wet with a solution of soda. For more severe burns, wash with antiseptic (see antiseptics) and send for a doctor.

Chills. Symptoms: Pallor; chattering of the teeth; coldness. Generally caused by malaria fever. Treatment: Immediately put patient to bed; wrap up warmly; use hot-water bags; administer hot drinks or a moderate amount of whiskey. Final Treatment: Get rid of the malaria by taking quinine, or send for a doctor.

Choking. Treatment: Remove by coughing, by slapping on the back, or by turning patient upside down.

Cholera Morbus. Symptoms: Vomiting, purging, and cramps. Treatment: Administer castor oil at first to get rid of bad food; then feed milk in small quantities.

Colic or Cramps: Remove the cause by castor oil or some purgative pills.

Constipation: Temporarily relieved by castor oil, or some purgative pills. Permanent treatment: Train bowels to regular habits, preferably on rising in the morning.

Corns: Get a larger shoe. The corn will never be cured while you wear the present shoe. Use Bluejay corn plaster after you have changed shoes, or Russian corn cure (10 cents).

Cough: Cough drops (heroin tablets) will relieve only temporarily. If cough is accompanied by hoarseness, it will be well to send for a doctor.

Croup: Spasmodic croup occurs in attacks at intervals. Between intervals, produce vomiting by half teaspoonful of ipecac every 15 minutes, or warm water and the finger inserted in the child's throat.

Catarrhal croup is continuous. Place a mustard plaster on the neck of the child, and cause the child to inhale steam. Send for a physician, if the attack does not pass at once.

Cuts: To stop the bleeding, press the finger or fingers directly upon the cut and press against a bone. Then hold this until a tourniquet can be made above the wound. A tourniquet consists simply of a handkerchief knotted around the leg and tightened by a stick placed between the knot and the body, and twisted very hard. Then send for a doctor.

Slight cuts should be washed in antiseptic (see antiseptics); the sides of the wounds pressed together; and the wound tied with antiseptic gauze or clean cloth.

Diarrhœa: Caused by some irritation of the intestines. First, take castor oil or some other purgative. The diarrhœa will cure itself. Diet should be restricted to milk until the disease is past.

Diphtheria. Symptoms: A cold in the throat; pain when swallowing; temperature about 101 degrees; takes about 5 days to develop; throat being rather swollen at the end of that time. Treatment: Treat for fever for a day or so. If found to be diphtheria, send for a doctor.

Drowning: Turn patient on the face and raise the stomach so that the water will drain from the mouth; turn on back, wipe out the mouth and throat. Repeat the operation. Then tie or

hold the tongue out to prevent it falling back and obstructing the throat and induce artificial respiration by raising the arms over the head, and carrying them back and pressing them against the chest 18 times a minute.

Earache: Wrap ear in hot cotton or cover with a hot-water bag. Another way is to place ear over a steaming pitcher of hot water. Never put any liquid in the ear.

Epilepsy: Simply fits. Send for a doctor. Nothing useful can be done for an epileptic except to prevent him from injuring himself until a doctor arrives.

Fainting: Caused by blood leaving the head. The patient will naturally recover, but can be assisted by holding aromatic spirits of ammonia under patient's nose, sprinkling water upon patient, and rubbing the hands. First lower the head below the level of the rest of the body so that the blood may run to the head.

Fever: The normal temperature is 98.4 degrees Fahrenheit. One hundred degrees Fahrenheit is called a fever. Do not bundle up with too thick clothing. This is all wrong. Give an adult phenacetin in 5-grain doses every four hours, or bathe adult or child with a sponge; bathe with alcohol or warm water. If the fever continues for over one day, it may become worse; so send for a doctor.

Hair: There is no real hair remover except the electric needle, which costs about 50 cents for each hair. There are some hair renewers, but the only one which is positively known is Glover's Mange Cure, and this requires several months of constant treatment. Dandruff is quickly cured by it.

Headache: This is generally a symptom of some other weakness. For immediate relief, give phenacetin to adults, or apply an ice bag to children or adults.

Hiccough: Drink nine swallows of water.

Hysteria: Leave the patient alone and leave the room. Do not coddle or sympathize.

Insomnia: See sleeplessness.

Intoxication: Let the patient sleep, or make him vomit by giving him warm water or warm soapy water.

Lungs, Bleeding: Not always caused by consumption. Will stop of its own accord. Send for a physician. Do not give alcoholic drinks.

Malaria. Symptoms: Begins with chills and perspiration at first stage; followed several days later by a fever with a temperature of about 104 degrees at night; accompanied by headache, delirium, and pains. Tongue white, later brown, bowels constipated. Vomiting, intense thirst. Treatment: Take quinine from 20 grains to as much as 40 grains. If no improvement, send for a doctor.

Measles. Symptoms: Red spots first in the nose and eyelids; later red spots on the throat, then head and neck, then the rest of the body. Accompanied by sneezing, weeping, cough, and fever. Treatment: Put patient to bed, give liquid diet, and if serious or with a very young child, send for a doctor. Quarantine for 12 days.

Mumps. Symptoms: Fever; pain below the ear; swelling of the glands of the neck and cheek. Treatment: Send for a doctor.

Nose Bleed: In serious cases make patient sit in cold water. In mild cases plug the nose with cotton or put cotton firmly under the upper lip.

Pain: Apply cloth soaked in hot water where pain is felt; apply occasionally a cold cloth to the forehead.

Pneumonia. Symptoms: High fever; 102 to 105 degrees after exposure; generally accompanied by chills, great prostration, cough, pain in the side, and perhaps delirium for about a week. Face is red and breath is short. Treat for fever until above 100 degrees, then send for a doctor.

Poison: Empty the stomach as soon as possible by making the patient drink warm water or warm soapy water in large quantities. Send for a doctor.

Rheumatism: Caused in various ways. A complete rest is best, and a physician should be sent for. The rheumatic serum, recently discovered, is about the only valuable treatment.

Scarlet Fever. Symptoms: Red cheeks; red pimples on palate, and on walls of throat. Later on the neck, cheeks, chest, and rest of the body. Accompanied by headache, vomiting, and fever. Looks a little like measles, but is much more serious. Treatment: Send for a doctor.

Sleeplessness: Put a hot-water bag or bottle at the feet and warm bed clothing. Do not take a bath.

Smallpox. Symptoms: A chill with fever; convulsions in children; high fever, headache, severe pains in the back, dry tongue, and at the end of the fourth day the characteristic eruption which consists of little hard bumps under the skin which feel like birdshot and can be rolled about. These pimples later become water blisters, puss blisters, crusts, scars, and pits. Treatment: Send for a doctor.

Snake Bite: Constrict the limb above the bite as soon as possible. The wound may be sucked by any individual who has no cut or sore on the lips or inside of the mouth. The bite should be cut larger to make this easy. Then cut it still larger and let the blood wash out the poison, or wash it out with a strong solution of permanganate of potash [a handful to a quart (four glasses) of water].

To stimulate the heart, give whiskey in fairly large doses, remembering that children are easily poisoned by whiskey.

Sprains: Immerse the sprained joint in very hot water for an hour or two; keep the water hot; then place the joint in a Plaster of Paris splint well padded with cotton padding, or imitate this splint as well as possible by putting cotton padding around the joint with a very tightly wound bandage over it. Do not exercise the joint at all for about two days.

Suffocation: Remove the immediate cause. Dash cold water in the patient's face, and induce artificial respiration as explained in drowning.

Sunstroke: Reduce the temperature, which is about 110° Fahrenheit, but do not reduce it too quickly. To do this, strip patient naked and sprinkle with ice water, and rub with ice. Do not put patient in ice water. Continue this until the temperature has fallen to 101° Fahrenheit. Then stop, put the patient to bed, and send for a doctor. If the temperature raises considerably, repeat this performance until the doctor arrives. Administer whiskey if the pulse weakens.

Throat, sore: Gargle with hot water; eat less.

Tonsilitis: Practically a very severe sore throat. Send for a doctor.

Toothache: Place in the cavity of the tooth a small piece of absorbent cotton soaked in oil of cloves, or a strong solution of carbolic acid. Be careful that the lips or throat are not touched with this acid. Go to the dentist as soon as possible.

Typhoid Fever: This is a disease of the intestines. Symptoms: Pain in the stomach for about a week; some 8 or 10 rose-colored spots on the abdomen. Fæces; liquid, greenish, and flaky. Quite often accompanied by complications. Treatment: Send for a doctor.

Unconsciousness: See also fainting. If the face is not pale as in fainting, raise the head instead of lowering; otherwise, proceed as in fainting.

Vomiting: To cause vomiting, drink warm salt water or warm soapy water. Give a child syrup of ipecac. To stop vomiting, drink warm water, which will cause the stomach to clean itself by vomiting, then take very cold milk in small quantities. Drinking water is unnecessary in mild cases.

Warts: Burn off with strong nitric acid, or cut out the wart, cutting the skin with it. These leave scars. The best way is to apply Russian corn cure or any corn cure or wart cure which covers the wart and keeps out air; the wart then dies off.

Whooping Cough. Symptoms: Same as an ordinary cold; then fever; a spasmodic cough, and after about ten days, an unmistakable whoop is heard. Treatment: Send for a doctor.

Wounds: See cuts.

For more detailed information, see *Family Health Book,* Roosevelt, price $2.50; *Home Encyclopedia of Medicine and Prevention of Disease,* Ditman, price $1.50.

CAMPING

There are certain rules for health in camp. Since the discovery of the germ theory, camp life has been made just as healthful as life in a house, except for the colds due to carelessness in getting chilled. Observe the following rules:

Place privy far from kitchen; dig a trench, and cover it with a fly proof box as explained in subject of Flies.

Screen the kitchen tent to keep out the flies; disinfect all nearby breeding places for flies; screen the dining tent.

Dig a hole for kitchen refuse, if only a short time in camp; otherwise, place in a can and take far away, or bury it.

Boil all water before drinking; do this even if the water has been examined and found pure; it is very apt to become impure during the presence of the camp.

Always sleep under a mosquito bar.

Keep thoroughly warm and dry at all times; if not so, build fires and become so as soon as possible. Preferably wear woolen clothes next to the skin (see chapter on Clothes).

Take along a Settler's Medicine Case.

CHAPTER VII

ETIQUETTE

General Remarks. Proper etiquette consists in following the social customs of the most intelligent people of a community. These customs are the result of years of experience. It is necessary that there be such customs, and an intelligent observance of such customs shows proper education and consideration.

Although any well-bred person will be polite and considerate in any situation, it is well to remember that the same customs are not exactly suitable under different conditions. For example, a dress suit would look absurd at a country dance in the summer time, while a dress suit is necessary at a dance in a large city in the winter; cards of admittance to church weddings are unnecessary at a country church where the whole community will be gladly admitted, while such cards are absolutely indispensable in large cities where mobs block the church doors at every stylish wedding.

In this chapter I have avoided as far as possible all information not needed for ordinary social customs; complete information on a more elaborate scale can be obtained from the many books of etiquette. Each author of such a book seems to have some particular hobby of her own, but the general ideas are the same in every case.

INTRODUCTIONS

The usual words of introduction are: "Miss Brown, let me introduce Mr. White". The first person named is usually considered as being entitled to the greater consideration; hence the implied request "let me" which is really a form. By this form, it is understood that Mr. White is being favored by being introduced to Miss Brown.

Following this form, the lady should always be named first in an introduction to a lady of a gentleman (except the President of the United States, who is always named first); an older lady should be named first, that is, the younger lady is introduced to her; if both ladies are about the same age, the married one should be named first; similarly a young man should be introduced to an older one, and if about the same age, the single man should be introduced to the married one.

In introducing relatives, the relationship should be stated, thus:

"Mother, let me introduce Miss Brown".

"Miss Brown, let me introduce my sister, Mary".

"Aunt Alice, let me introduce Miss Brown".

On being introduced, it is proper to shake hands, and each or both should rise at once, except an old lady or an invalid may remain seated.

The man will politely say "It is a pleasure to meet you, Miss Brown", and the lady will politely say "I am very glad to meet you, Mr. White"; though this is not really important, for no one pays any attention to just what is said. Such elaborate phrases as "I consider it an especial pleasure to become acquainted with you, Miss Brown" are embarrassing and absurd.

If a person enters a crowded room, it is best to take him or her around and make complete introduction to everyone in the room. This is a little disconcerting, but is of advantage ultimately. If there are reasons why this person should not meet any other person in the room, these reasons should be discarded for the time being; if these reasons are such as cannot be discarded, then this person should never have been allowed to be present.

At crowded entertainments it is not improper for any gentleman to introduce himself to a young lady with whom he is temporarily thrown and to whom through oversight he has not been introduced. The words are: "Let me introduce myself; I am Mr. White." The response is: "I am very glad to meet you, Mr. White; I am Miss Brown." It is best for the young lady not to introduce herself to the young gentleman. If he does not know enough to introduce himself, the young lady should go elsewhere. An older lady should introduce herself to a younger one, under such circumstances.

Letters of introduction are of little value. Most persons put them in their pockets, and never present them. If you really wish a friend in a distant city to meet one who is going to that city, you should write a letter to the friend living there, giving date and stopping place of the visiting friend and requesting her to call on your friend. The letter should state exactly as possible the extent of your friendship, and if the acquaintance justifies your making any requests, what courtesy you desire extended.

CALLS

The matter of calls is important, at times. Among old friends, calls, are paid without regard to the last call, by whom made, date, etc. But as calls are the only method of learning the possibilities of future friendship, the subject has a certain importance among all but very old friends.

A newcomer or a bride should be visited within a month after her arrival. She should return this call within ten days.

If a call is desired after an introduction, the person introduced should make the call. Generally, permission should be requested to make such call. A young lady may, as a special favor, invite young men to call on her. Preferably, such an invitation should be extended by her mother, but it is not absolutely necessary.

In case of death, illness, birth, etc., a call is quite proper. Such calls need not be returned.

If one is invited to a dinner, reception, etc., a call should be made within two weeks, whether the invitation was accepted or not. Such an invitation is equivalent to a call by the person giving the invitation, except first calls which must always be made. If the persons use such invitations in lieu of calls, it is not improper. If you want to do so, you are at liberty to follow that scheme.

Calling cards are used in cities. Business men take advantage of this system and send their cards by the female members of their families. This is considered quite proper.

Cards: The sizes of calling cards are 3″ by 2″ for a woman and 3⅛″ by 1 9/16″ for a man. The name should be placed near the center and the address should be written in the lower right hand corner. A business card of a man or woman should have some words descriptive of the business placed in the lower right or left hand corner. The following forms are used for social calling cards:

For a man	Mr. John E. White
For a married woman	Mrs. John E. White
For a widow	Mrs. Mary B. White
For an unmarried woman	Miss Mary E. Brown
For a divorced woman	Mrs. Mary Brown White
For a doctor	Dr. John E. White

In making a visit, one card should be left by the lady for each lady she is calling on, and one card should be left by the man for each lady and each man. All cards should be handed to the servant by the older lady.

Printing or engraving visiting cards costs about 50 cents to $2.50 per hundred.

WEDDINGS

Invitations: The following is the usual form for wedding invitations:

Mr. and Mrs. William J. Brown
request the honor of your presence
at the marriage of their daughter
Mary Elizabeth
to
Mr. John Evarts White
on Thursday, the nineteenth of June
at half-past three o'clock
Holy Trinity Church

If Mr. Brown is not living, the form will omit his name.

If Mrs. Brown has married again, the form would be:

Mr. and Mrs. Henry K. Jones
request the honor of your presence
at the marriage of their daughter
Mary Elizabeth Brown
to
Mr. John Evarts White
on Thursday, etc.

If the young lady's mother is not living, one of her relatives will issue invitations in the above form. If she does not care to have the invitations issued by a relative, they may be issued by a friend, but the usual form is a mere statement of invitation, as follows:

The honor of your presence is requested
at the marriage of
Mary Elizabeth Brown
to
Mr. John Evarts White
on Thursday, etc.

If the wedding is to be held at home, the last line will be the home address, thus "231 Fourteenth Street" instead of "Holy Trinity Church."

To prevent undue crowding at the church, there is also often a card with the invitation which reads:

"Present this at the church"

This card should always be brought; otherwise, admission may be refused. Personal appearance is no excuse; many crooks dress exceedingly well.

Guests: The bride decides how many guests she wishes to invite to the reception, and confers with the groom as to how many of these guests shall be his relatives or friends.

Gifts: An invitation to a wedding is not a request for a gift, though many so consider it. The following gifts are practically necessary:

The best man gives the couple some useful article for the dining room or reception room.

The maid of honor gives the bride some personal gift.

The ushers together give one gift to the bride.

The bridesmaids together or separately present something to the bride.

The groom gives the bride some jewelry that she can wear, such as a necklace, a brooch, etc.

The bride should acknowledge all of the wedding gifts. This should be a personal note, even to those she has never met. If the bride's handwriting is not known to the donor, her friends often write this letter of thanks, but this is improper. The letter may be written on card, or on note paper. The gift itself should be stated as "the bonbon dish" or the "dozen spoons," not as the "silver piece".

All presents, when possible, should be marked with the initials of the bride before being sent. This applies especially to silver presents, as the cost of marking these presents will later have to be borne by the bride, while any jeweler will without charge mark silver presents before being sent.

Expenses: The bride or her family pay the following expenses:

The bride or her family pay the following expenses:

Wedding invitations, cost about $5 for 100, $15 for 500
Decoration of church
Awning at the church door
The sexton's fees
The music

Carriage to take her to church
Carriages for the bridesmaids
Carriages to bring visitors from trains to house

The groom or his family pay the following expenses:

The license
Fee to clergyman ($5 to $50)
Wedding ring
Bride's bouquet (she tells him what to get)
Gifts to ushers and best man
Gloves and ties for ushers and best man
Carriage in which he and best man ride
Carriage in which he and bride ride
Often invites best man and ushers to his house

NOTE: All expenses of groom are paid directly by the best man with money given him by the groom.

Reception at House after Wedding: The bride's father will stand at the head of the reception line. Next will be the bride's mother, followed by the bride, groom, maid of honor, best man, bridesmaids with their corresponding ushers in order. The groom's mother and father may be next in the line, but often they are placed next to the best man.

Guests will speak to the parents of the bride; will then say to the bride "I wish you much happiness"; say to the groom "I congratulate you" or words to that effect; the remainder of the reception line will be greeted without formal words. If necessary, each person in the receiving line will introduce the guest to the next person. Guests should not place themselves in prolongation of the reception line, but should pass on and mingle with other guests in the reception room or in the refreshment room.

Wedding Anniversaries: Invitations to wedding anniversaries are issued in the following form:

1889 1914

Mr. and Mrs. John E. White
request the pleasure of your company
on the twenty-fifth anniversary of their wedding
Thursday afternoon, June nineteenth
from four until seven o'clock
1222 Park Avenue

Certain gifts are appropriate for each wedding anniversary as shown in list below. It is not proper to present other gifts more expensive.

1	year,	cotton	15	years,	crystal
2	years,	paper	20	"	china
3	"	leather	25	"	silver
5	"	wooden	30	"	pearl
7	"	woolen	40	"	ruby
10	"	tin	50	"	golden
12	"	silk	75	"	diamond

Customs: The groom often gives a bachelor dinner the evening before the wedding. This custom is dying out.

The groom selects the wedding ring; the bride does not go with him, but gives him instructions as to size, width, etc. On the day of the wedding, the groom first sees the bride at the altar. He sees her but rarely for two or three days before the wedding.

The bride selects the dresses for the bridesmaids. They pay for them; acceptance of invitation to act as bridesmaid involves this expense.

The maid of honor should be invited to the bride's house, and expected to remain there until the day after the wedding.

LETTERS

The formal letters so often used by our ancestors are rapidly giving way to the more informal use of the telephone. In general, a letter is written inviting guests to be present, or inviting guests to a house party; and it is only when there are many such invitations that formal invitations are issued. A letter is never improper, even in response to a formal invitation.

A woman's letter or note paper should be white and unscented.

The writer's address and date of letter will preferably be placed at the upper right hand corner, though many notes have same at the end of the letter, in the lower left hand corner.

The letter or note should follow certain forms in beginning, thus:

To a mere acquaintance	My dear Miss Annie or My dear Mr. Green
To an old friend	Dear Annie or Dear Mr. Green

The letter or note should not begin with "I", nor should it contain superlative expressions that would preferably not be used in conversation.

The conclusion should be "Yours sincerely" or "Sincerely". To complete strangers, the conclusion should be "Yours very truly".

The signature should be complete, (except to very close friends) thus "Mary E. Brown". A married woman should sign her name "Mrs. John E. White" or "Mary B. White" to personal friends.

Letters to persons with a title, should make use of the title, thus "My dear Senator Simpson" or, if well acquainted, "Dear Senator".

DINNERS

The usual form for invitations is written or printed as follows:

Mr. and Mrs. John E. White
request the pleasure of your company
at dinner
on Wednesday evening, March the twelfth,
at seven o'clock
1222 Park Avenue

The reply is written as follows:

Mr. and Mrs. Frank V. Green accept with pleasure Mr. and Mrs. John E. White's invitation to dine on Wednesday, March the twelfth, at seven o'clock.

or

Mr. and Mrs. Frank V. Green regret very much that a previous engagement prevents their acceptance of Mr. and Mrs. John E. White's invitation to dine on Wednesday, March the twelfth, at seven o'clock.

Often the dinner is given for a visitor, in which case the invitation will be:

Mr. and Mrs. John E. White
request the pleasure of your company
at dinner
on Wednesday evening, March the twelfth
at seven o'clock
1222 Park Avenue
To meet Mr. and Mrs. Samuel N. Norris of Philadelphia

The acceptance or refusal will be exactly the same as above, not mentioning Mr. and Mrs. Samuel N. Morris.

If the invitation is by personal note, it should be short and to the point, as follows:

Dear Mrs. Green:

Mr. White and I shall be much pleased to have you and Mr. Green at dinner on Wednesday, March the twelfth, at seven o'clock.

Yours sincerely,
Mary B. White.

The reply should be equally short and to the point, as follows:

Dear Mrs. White:

It gives Mr. Green and me great pleasure to accept your invitation to dinner on Wednesday, March the twelfth, at seven o'clock.

Yours sincerely,
Helen K. Green.

If the invitation is refused, the refusal should be in the form of a note, and should give explanation of the reason for such refusal.

Guests should always arrive promptly at the time designated. If the hostess makes the error of inviting the guests at an hour really not expected, the hostess is at fault. Dinners cannot be delayed and guests know this. Nor should guests spend unnecessary time in the house before dinner. A hostess should show courtesy to guests already arrived by not waiting for belated guests more than fifteen minutes after the dinner hour.

At large and formal dinners, each gentleman on his arrival is given an envelope, in which is the name of the lady he is to take in to dinner. At smaller dinners, the hostess will name the couples, thus "Mr. Green, will you take in Miss King", or the formal entrance by couples may be omitted.

Name cards may also be placed at the plates; this saves much inconvenience. The lady guest of honor sits on the host's right; the gentleman guest of honor on the hostess's right. At small dinners, place cards are not necessary for there are few seats to be assigned after the guests of honor have taken their places.

The forks are on the left of the plates, the knives and spoons on the right, each article being farther from the plate than the ones used after it.

The ladies should be served first, beginning with the lady on the right of the host. All dishes should be handed to the left hand side. All wine, etc., should be poured from the right hand side.

The custom of carving at the table is now discontinued. All carving is done in the kitchen.

A dinner with many courses will be served in the following order:

1st Grapefruit (or something similar)
2nd Soup
3rd Olives, celery, etc., passed
4th Fish, potatoes, etc.
5th Mushrooms, (or something similar)
6th Asparagus
7th Meat with vegetables
8th Frozen punch
9th Fowl with salad
10th Pudding
11th Dessert and cakes
12th Cheese with crackers
13th Fruit, bonbons
14th Coffee

For such a dinner the wines would be served:

1st course—a white wine
2nd course—sherry
Other courses—champagne

All guests will rise when the hostess rises. The ladies will withdraw; the men may remain and smoke for a time. The men will later join the ladies in the reception room.

After about an hour, guests will leave. On leaving, each guest will shake hands with the hostess and say "Good night, Mrs. White, this has been a most agreeable dinner" or something similar. It is not necessary to say anything similar to the host, nor is it expected that the guest shake hands in farewell to any person except the hostess, the host, and other grown members of the immediate family.

Special Points. The elbows should never be placed on the table. Nor should the hands be elsewhere than in the lap; especially they should not be engaged in twirling the spoons or drawing fancy figures in the table cloth. The napkin should not be tucked in the clothes; it should be spread, half folded, in the lap. The spoon should be dipped into soup and moved away from the diner. Bouillon is stirred with a spoon and tasted, but it is drunk from a cup. The knife and fork are both left in the plate when passed for a second helping, or when the course is finished. Seeds of dates, plums, etc., are inconspicuously removed from the mouth with the left hand, and placed on the fruit plate.

DANCES

It is not at all improper to use the telephone or a personal letter in inviting persons to a dance. If formal invitations are issued, the following is the form:

Mr. and Mrs. John E. White
request the pleasure of your company
on Wednesday evening, March the twelfth
at nine o'clock
Dancing 1222 Park Avenue
R. S. V. P.

If the invitation is issued by a club, the form is similar, thus:

The Cotillon Club
request the pleasure of your company
on Wednesday evening, March the twelfth
at nine o'clock
R. S. V. P. to 131 Broadway
Mrs. John E. White,
1222 Park Avenue

The letters "R. S. V. P." mean "Answer, if you please". They are used where it is necessary to obtain a reply; in this case, a reply is necessary because preparation must be made to entertain the number who may be present. "R. S. V. P." is not generally placed on dinner invitations because it is supposed that everyone knows the necessity of previous notification and will answer the invitation without request. Nor is it generally placed on invitations to receptions, because preparations are generally made to entertain as many as may desire to come.

The reply to a dance invitation is of the following form:

Mr. William N. Black
accepts with pleasure the
kind invitation of
Mr. and Mrs. John E. White
for Wednesday evening, March the twelfth
at nine o'clock
1222 Park Avenue
or
Mr. and Mrs. Frank V. Green
or
Miss Mary E. Brown
regrets exceedingly that her absence from town
renders her unable to accept the kind invitation of
Mr. and Mrs. John E. White
for Wednesday evening, March the twelfth
at nine o'clock
1222 Park Avenue

On arriving, the lady goes to the ladies' dressing room to remove her cloak and the gentleman goes to the gentlemen's dressing room for the same purpose. The gentleman then waits outside the ladies' dressing room until the lady appears at the door, when he escorts her to the dance hall.

The reception committee takes position near the entrance to the dance hall, first the hostess; or if a dancing club, the secretary of the club, and after him in order a patroness, another man, a patroness, etc.

On reaching the dance hall, the lady first and then her escort meet the reception committee. If the reception committee has not taken position, the lady and her escort stroll around until the the committee has taken position, and then meet the committee.

If dance cards are available, the escort will obtain two and write the names clearly at the top, on the inside. In writing his name for a dance, a gentleman should write his name clearly so that it can be read. Initials and signs are evidence of conceit and ill-breeding.

The matter of asking for a dance is very simple. The gentleman should say "Will you kindly give me a dance, Miss Brown", and he may say this immediately after being introduced. Miss Brown should say "I should be pleased", and hand him her card; or she may say say "I am so sorry, but I have not one dance left", and hand him her card as proof, if she wishes him to understand specially that she is sorry, or she need not hand him her card in case she wishes to keep open certain dances or has already promised them elsewhere.

After writing his name on a card, the gentleman should say "Thank you—I have No. — I shall see you then" and leave. He should not stay around and converse, unless he expects to get no more dances elsewhere, because another lady cannot wait too long for him to come and ask her for a dance. It is not polite to leave a lady alone; and sensible ladies will gather in groups of two or three (not more) so that the filling of cards may be facilitated by allowing the gentlemen to leave.

Under no circumstances, should a dance be "cut". The dance should never be given, if such is intended. If the same gentleman has two dances, and the first is unsatisfactory to the lady, the second should also be danced regardless of the discomfort. If a

lady or a gentleman "cuts" a dance, it is considered merely an impolite and crude manner of showing dislike and of showing that no further friendship is desired at any time.

When the music starts for the dance, the gentleman should approach the lady and say "I think this is the dance you promised me, Miss Brown".

When the dance is completed, the couple may stroll around the room until the next dance starts. When the music for the next dance commences, the gentleman should not wait for another one to come for his partner, but should say "Will you excuse me? I have an engagement. Where would you like to be taken", and and the lady should say "Please take me to Mrs. —". On parting, the lady should say "That dance was very nice" and the gentleman should say "I thank you, it was very pleasant". If the lady has not her next dance engaged, the gentleman may ask for it, or on leaving mention this fact to her chaperone; but he should not delay at all to leave, if he has the next dance engaged. Nor should a lady ever fail to ask to be taken to her chaperone at the beginning of a new dance; this is especially important, because otherwise the gentleman will be forced to leave her alone, as he must do to fill another engagement, and this will be embarrassing to both.

On leaving the dance, the couple should shake hands with at least two of the reception committee, and should say "I have had a very delightful evening" or words to that effect.

If there are refreshments, the lady should be with her escort during that time. If refreshments are served during dancing, he should select certain numbered dances which will take place during this time. If it cannot be avoided, he will have to leave other partners in order to be with his own partner during refreshments. This should be explained to his other partner or partners, with whom he has the dance engaged. Such occurrences should be avoided.

HOUSE GUESTS

Invitations to a friend to visit you should always state the day when she is to come and the day she is to leave. For example, the invitation is generally by letter and it should state the reason for such invitation, the other guests if any, who are to be present, and should state precisely some words like these: "Cannot you

come to visit me from Thursday the twentieth until Saturday the twenty-ninth", or "for two weeks beginning Thursday the twentieth."

When a guest leaves, she should be gently urged to stay longer, but she should not do so. If she does, she should not be invited again. A hostess has to make arrangements for a definite visit of her guests, and she does not expect this time to be prolonged, however much she may say so.

After reaching home, the guest should write a personal letter of thanks to her hostess.

Invitations to visit "first time you are in this vicinity" or "any time you get a chance", are mere polite phrases and mean nothing at all. Unless a definite date is given, no such invitation should be accepted.

Guests should be friendly, but they are not expected to make themselves too much at home.

On leaving, guests may give some tips to the servants, but this is generally unnecessary.

TIPS

However much they may be objectionable, it is a fact that tips are necessary in order to obtain the best service. Sometimes, the value of money thus spent is obtained in increased comfort. Ladies generally tip less; but they likewise get less service.

A safe rule to follow at hotels or restaurants, is to tip the waiter ten per cent of the bill. If this is done, the waiter will be careful to give proper service. It shows that you know what is expected, and what to expect from him. If you wish especial service, a greater tip will hurry him, but this must be given before the service. He will still expect the ten per cent. This custom is unfortunate, but it is the custom.

A Pullman porter should be given 25 cents for shining shoes and making up the berth. In the day time, 10 cents is the tip for brushing the clothes and for other care, but it is rarely given.

Persons living in a hotel should tip the servants ten per cent of the total bill. This may be divided among the maids, porter and waiters, including the head waiter.

On a steamship, 10% of what the same care would cost on land is about correct (omitting the cost of fare). For example, the

amount expected by each attendant who does as much work as a Pullman porter is likewise 25 cents per day.

Many persons object very strenuously to giving tips. If such persons can obtain the service otherwise, it will be well; but servants can generally guess such intention by the manner of the person and they govern themselves accordingly. There is practically no redress from the employers of the servants, because these employers quite often give the servants very little wages in addition to their tips, and such tips are a recognized source of wages. Some hotels have even tried a no tipping scheme, but have abandoned it.

OTHER POINTS

Children should be trained to keep quiet before older persons, and not to speak unless spoken to.

Ladies should remove their hats at the theater, unless in boxes.

Applause should be by clapping the hands, not by stamping with the feet or striking with a cane.

A gentleman always offers a lady his right arm, in escorting her.

A gentleman always walks on the street side of a sidewalk, unless the lady has his arm.

The custom of helping a lady up a step is becoming obsolete.

When riding horseback, the lady is generally on the left. In helping a lady on a horse, the gentleman places his open right hand about a step higher than the ground, and lifts her when she puts her foot in his hand.

A gentleman lifts his hat on meeting a lady with whom he is acquainted; he also lifts his hat when with a lady who bows to an acquaintance. Ladies or gentlemen speak to servants similarly. There is no rule as to who should speak first, but it is customary for the lady to first show some recognition.

A lady precedes a gentleman in church, out of church, and in a crowded street unless it is evident that he should go first for greater convenience.

Young ladies should not accept permanent presents from young gentlemen unless they are engaged. Permanent presents are such as may be returned after friendship ceases, such as jewelry, gloves, veils, fans. She may accept candy, fruit, flowers, books, etc.

In conversation, do not interrupt anyone in the act of saying something. There is no necessity, generally, of saying what you intended to say. As long as the conversation is being carried on, everything is satisfactory. If a person starts to relate some event, and there is interruption by some one else for reasons unavoidable, show proper attention at first opportunity by requesting that the person continue the story as before interruption.

Observe the rules of etiquette in your own home; they will then be simple and natural to you in the homes of your friends.

For more detailed information, see *Encyclopedia of Social Usage,* Roberts, price $2.50.

CHAPTER VIII

ACCOUNTS

General Remarks. Very few women have had any business education before marriage, and it is not convenient to acquire such an education after marriage. Consequently, few wives can understand the simplest rules of bookkeeping without great effort. Before marriage the few pitiful attempts of a girl to keep her accounts are considered amusing by her friends or her fiancé. After marriage, the wife is at once placed in the position of disbursing member of the partnership, and her pitiful attempts cease to be amusing, and become tragic.

After consulting business forms, and securing the aid of a bookkeeper, the author has devised a simple method of keeping accounts, household and personal. Enough blanks are placed in the book to give the wife experience in the use of this method; so that, if the method is satisfactory, it may be continued. A complete set for a year comprising the blanks as placed here in the book, will be sent upon receipt of 25 cents.

There are many more complete forms, but the author has decided that they are too complicated. There is no necessity for more detailed records.

NECESSITY FOR ACCOUNT KEEPING

The great majority of women, and often their husbands, see no necessity for keeping accounts. As they say, the money is honestly spent, and what is the use of keeping a lot of red tape to show where it is going. This argument is very good, but I have never known a family who kept accounts at one time, and later stopped keeping same. Invariably, they have continued the practice; and have often gone into greater detail, which seems to be unnecessary.

The reasons for keeping accounts are:

1st: Each day, the wife should know how much money she has spent during the month up to and including that day. The object is not to know this amount purely for the knowledge itself, but to compare the amount spent with the amount which is allowed her for the month up to and including that day. This is by far the most important reason for keeping accounts. Quite

often, in fact almost always, the wife is given a fixed amount or herself decides upon a fixed amount as her allowance to be spent during the month. Suppose it is understood that she can spend $40.00 during the month for food, children's clothes, and daily expenses, excepting her own and her husband's expenses. Then, on the night of the 15th of the month, the total expenses which she has incurred, cash and charged, should not be more than $20.00. If, on the night of the 15th, she has spent more than the $20.00 allowed, then she must spend less during the second half of the month. All of this is shown in the blank forms.

2nd: At the end of each month, the wife should be able to tell her husband just how much the bills will be, and to whom they are due. If she does not keep accounts, she almost invariably forgets some bills, and the expenses are greater than expected. If the question of expense is of no importance, it would really be cheaper and more satisfactory to the husband, for the wife to employ a secretary and have her keep the accounts rather than not have them kept at all. But, if the wife must not exceed an allowance for house expenses, it is absolutely necessary that she know just what are her expenses.

3rd: It is also necessary to keep some kind of check upon the grocer, butcher, etc. In these day of hurried effort to get money, it is sad but true that many grocers, butchers, and other merchants charge on the book more than is actually furnished. Few wives check this up, and none check it up unless they keep accounts of some sort. Likewise, it is not unusual for the merchant to enter the amount properly on one day, and then to increase the amount some time say a week later; consequently, it is not enough for the wife to see that the proper amount is charged for the day; it is necessary to keep account of the total amount due to date. As many merchants add the total to date after each item is entered, this is very easily checked.

Some wives even keep such elaborate accounts that they enter each amount, with its cost per pound, quart, etc. There appears to be no good purpose served by such extreme detailed system. A statement as to the cost per pound, quart, etc., will be of some value to the new housekeeper, but a little experience will show that this is mere useless work after the first few weeks.

HOUSEHOLD DUTIES

Customs: It is the custom in this country for the wife to attend to all of the household duties. This comprises:

Cooking meals
Hiring servants
Ordering groceries
Buying children's clothes
Care of all clothes
Keeping house clean
Care of yard and garden
Keeping furniture in condition

She need not actually attend to all of these duties herself; if she has servants, they will relieve her of a great deal of this work. Too many servants are, however, as much trouble as no servants at all.

To properly perform these duties, the wife should be provided with a certain allowance each month. The amount should be decided after husband and wife have discussed their financial condition. Quite often, the husband refuses to let his wife know anything about his finances, and only tells her to run the house to suit herself. This is all right, if there is little question of expense, but where the income is very small, a policy like this results in continual bickerings with her husband because of too great expense, or in too great stinting of the family in order to be sure that the expenses will not be heavier than is allowable. A husband should not force his wife to adopt such a policy.

As for the husband who will not give his wife an allowance, there is very little commendatory to be said of him. Either he has no confidence in his wife's ability, which will soon be justified if he gives her no opportunity to develop, or he is selfish and wants her to come to him like a servant and explain every time she needs money. Eventually, a family of this kind will consist of a selfish, overbearing husband and a timid, discontented wife.

In most cases, the husbands give their wives a fixed amount for all house expenses, including her own. This scheme is very good; but has the one disadvantage that the husband takes no interest in his wife's work, she has no object in telling him of good bargains she has made, and eventually she may acquire a tendency to cut down on the meal expenses in order to increase the savings for her own personal use.

Another scheme, which is also good, is to allow the wife a certain amount for her own expenses, regardless of the amount of the house expenses. This scheme has the disadvantage that she has no direct inducement to decrease the house expenses.

The following system of dividing income has been tried and recommended by all who have tried it.

Fix a certain amount as the allowable expense for the month for food, clothing for the children, books, magazines, school books, laundry, theaters, servants, minor articles of furniture such as towels, sheets, crockery, coal, etc.; in fact, all running (daily or weekly) expenses.

At the end of the month, add these expenses, the monthly expenses such as newspapers, rent, lights, water, etc.; in fact all monthly expenses.

Subtract the sum of these expenses from the monthly income and divide the remaining balance into three parts; one third for the husband, one third for the wife, and one third to be placed in the bank for important expenses, such as life insurance, articles of furniture of considerable cost, etc.

Let the husband and wife keep their money separately, and let each pay for own personal expenses. The wife should purchase necessary articles of clothing for the husband, but he should reimburse her for the money thus spent.

This system places the burden of all household expenses on the wife. It is my opinion that this is as it should be. At first, the husband, who necessarily has business training, will have to help her with advice and show her how to keep the accounts, but eventually she will be able to run the house without difficulty. If she has not the ability and cannot be taught, then the husband is indeed unfortunate, for he has not the time to attend to these duties himself; and if he has to employ a housekeeper to supplement his wife's lack of intelligence, his expenses are much heavier than they should be. However, it will generally be cheaper for him to employ a housekeeper, because a witless wife will foolishly spend more money than a housekeeper will cost.

VARIOUS METHODS OF SAVING

At times, through this book, the cost prices of articles are named so that the wife may have a fair idea of what the cost should be in her own town. The large mail order houses, like

Sears, Roebuck & Co., Chicago, or Montgomery, Ward & Co., Chicago and Kansas City, send out catalogues showing prices on practically every household article. These catalogues cost nothing, and should be obtained. Just write to each of these firms requesting a copy of their latest catalogue. They will gladly furnish same.

Groceries: There have recently been enacted laws requiring exact measures of articles. The wife should measure the amounts, and notify the grocer if they are not as charged. The grocer will become angry; but after one or two notices, he will improve. A particular source of trouble is the short weight on butter. This should be checked on scales. A scale weighing to 24 pounds costs less than $2.00, and it will more than pay for itself in two months.

Butcher: Very rarely does the butcher furnish full weight unless he suspects that the meat will be weighed. As the penalty is very heavy for short weight, he will improve at once if notified. If he does not do so, he should be reported to the proper authority, generally the Health Officer.

Milkman: There is seldom trouble with the milk. Nearly everywhere there are inspection laws which are very strict. However, it will be advisable to send a sample of the milk about once a month to the Health Officer, who will examine it free of charge, and report if it is all right. This examination is particularly necessary in a household where there are little children and babies.

Food in Season: It will be noticed in the chapter on Food that the vegetables, and meats when possible, are included in the tables of meals at the times in which fresh vegetables can be obtained. This is rarely cheaper, for many canned vegetables can be bought about as cheaply as fresh vegetables. However, in all cities or country districts, there are certain fresh articles which can be bought more cheaply at certain seasons of the year than the canned article. At any rate, the fresh article is more healthy than the canned article, and should preferably be used.

Clothing: Bargain sales are continually going on in the cities. Generally, these so-called "bargains" are really not cheaper than similar articles elsewhere; but it is possible to really find times when clothing can be bought very cheaply at these

sales. A wife should carefully read the newspapers in order to pick out such bargains. As the object of such sales is to attract the purchaser and sell her something else, one should be particularly careful to buy only such articles as are really bargains, and to buy these only when they are needed, or when it is advisable to buy now for future use.

Receipts: No one has ever told me of an instance when a tradesman made an error in favor of the housekeeper. When he makes an error in his own favor, it is very hard to prove the error because the tradesman keeps books, and the housekeeper does not. When finally convinced that he has made an error, the tradesman is willing as a favor to correct the error, but never seems to feel that an apology or even more care in future is necessary.

To check payments to tradesmen, there are three methods:

1st: The daily account of money spent; this is the most valuable because it shows when he was paid and shows that the amount on hand was decreased by the same amount. This is the best and only really important check.

2nd: Old receipts. Receipts should always be signed by the tradesman as "Paid in full to date (or end of month)". Tradesmen never do this unless forced to do so. Such a receipt is sufficient in case of dispute; all old ones can be safely destroyed. If no such receipt is obtained, all old receipts should be kept for two years. They can most conveniently be kept, filed by alphabet, in a box letter file (cost 30 cents).

3rd: Old checks, or check stubs, serve as aids to memory; they generally convince the tradesman, if he sees his own endorsement on the check.

Kitchen Economies: Attention is invited to the chapter on cooking, where the comparative costs of various fuels are listed. The old method of cooking with coal or wood stoves is generally very expensive for households, as compared with oil in almost any locality and with gas, gasoline, or electricity in certain localities. It is a custom of our ancestors, which is hard to break, but eventually all households will dispense with coal and wood for kitchen fires.

Also, servants will work for less, or will do more useful work, in a household where coal and wood are not used; this is an economy.

Absurd Economies: A woman should use judgment in the employment of her time. For instance, I knew an estimable lady who had been taught by her mother to make tapers in order to save matches. As matches cost about 1 cent per hundred, I estimate that this lady saved by steady work, almost half a cent an hour. As she paid her cook about 10 cents an hour, I think that she was wasting her time. A wife should see just what she can do that will save the most money for the time spent. Preserves are expensive, pickles cost money, cakes are not cheap; possibly she would save money if she made these things herself. On the other hand, clothes are expensive, and she may have special ability or training with the needle. If so, she should not make preserves and pickles; she should make clothes, darn socks and stockings, do all her own sewing and hire a cook. She may even sell some of her own sewing; fancywork is paid for at fancy prices. Some wives find that they have ability to write and sell articles for magazines or newspapers. If a wife can really make more money this way than she can by doing other work, she should do so; but it must be remembered that it is not a question of her ability to write such articles, but a question of the selling value of the articles. If she wishes to indulge herself in writing them anyhow, this work should be done after all other household duties have been completed.

Some wives take special pleasure in care of children. (All wives should take special pleasure in care of their own children.) As nurses are nearly as expensive as cooks, such a wife should have a cook and do the nursing herself. This is particularly advantageous for the child.

EXPERIENCES OF OTHERS

Financial Budgets of Many Good Housekeepers: It is especially to be noticed that the mere keeping of accounts is of no value whatever; a dead list of where the money was spent is useless; a live list showing how much money is to be spent for separate items during the month, and how much is left for this purpose each day, is what is needed. Studies of the expenses of good housekeepers in all walks of life have shown that, with rare exceptions, the amounts spent for food, clothing, shelter, etc., are practically the same for incomes of the same amount, regardless of the population of the community or the occupation of the

breadwinner. In large cities, as compared with life on a farm, with same income, the food is not so healthful, the comfort of living is not so great, and the character of the companions is not so satisfactory; but for the same income the proportional amounts for food, clothing, shelter, etc., are nearly the same.

The following table will be useful to the wife in deciding what amounts should be set aside for different expenses; these tables represent the average actual expenses of good housekeepers who lived within their incomes and saved a little money, with a family consisting of husband, wife and two young children.

Monthly Income.	Food.	Shelter.	Heat, Light, etc.	Clothing.	Medicine.	Church, Charity, etc.	Servants.	Insurance.	Incidentals.	Savings.
$ 60	$25.00	$ 6.00	$ 5.50	$ 6.00	$1.00	$ 3.00	$ 2.00	$ 6.00	$ 2.50	$ 3.00
75	26.00	9.00	8.00	7.00	1.00	4.00	3.00	8.00	3.00	6.00
90	27.00	13.50	9.00	9.00	1.50	5.00	4.00	9.00	4.00	8.00
100	28.00	16.50	10.00	10.00	2.00	6.00	4.50	10.00	4.50	8.50
115	30.00	20.00	11.25	12.50	2.25	7.00	5.00	11.00	6.00	10.00
125	33.00	22.00	11.50	13.50	2.50	8.00	6.00	12.00	6.50	10.00
150	40.00	25.00	13.50	17.50	3.00	9.00	7.00	15.00	7.00	13.00
200	45.00	32.00	19.00	25.00	4.00	10.00	8.00	20.00	10.00	27.00
250	50.00	35.00	24.00	35.00	5.00	15.00	10.00	25.00	11.00	40.00
300	55.00	40.00	30.00	40.00	6.00	25.00	15.00	30.00	12.00	47.00
500	65.00	60.00	43.00	50.00	7.00	30.00	20.00	50.00	15.00	60.00

For more detailed information, read *Increasing Home Efficiency*, Bruere, price $2.00. This is an unusually good book and should be carefully studied.

FORMS FOR ACCOUNTS

The following forms are placed at end of this chapter:

12 monthly sheets of Household Expenses
12 monthly sheets of Daily Household Notes
12 monthly sheets of Husband's Accounts
12 monthly sheets of Personal (Wife's) Expenses
12 pages for list of property

These forms are simple and require very little work. A wife can quickly learn to keep them, and will find that the satisfaction of knowing how she stands far outweighs the little trouble in keeping accounts. About ten minutes each evening will be sufficient to make all necessary entries. Any husband can easily explain the forms, but a few hints are given herewith to assist.

Household Expenses and Notes: In each community certain amounts are spent or charged during the day, and certain expenses cannot be determined until the end of the month. Food, children's clothing, servants, and incidentals are daily or weekly expenses; while heat, light, rent, and insurance are monthly expenses. The money for the monthly expenses can be kept by the husband or wife, but the money for the daily expenses should be given her at the beginning of the month.

To determine this amount: Suppose that the monthly income is $125 per month. A study of the above table giving financial budgets of other good housewives shows that the wife should receive on the first of each month $55 for daily and weekly expenses as follows:

Food	$33.00
Clothing for children, about	3.50
Medicine	2.50
Church	3.50
Servants	6.00
Incidentals	6.50
Total	$55.00

Being allowed each month $55, she should on the first of each month fill in the column "Allowance to date" from the following table, or if not in this table, by multiplying the total allowed amount by the amount allowed to date for each dollar (in the column of $1.00).

Total Allowances to Each Day

Total for Month	$1.00	$10.00	$30.00	$50.00	$70.00
1	.033	.33	1.00	1.67	2.33
2	.067	.67	2.00	3.33	4.67
3	.10	1.00	3.00	5.00	7.00
4	.133	1.33	4.00	6.67	9.33
5	.167	1.67	5.00	8.33	11.67
6	.20	2.00	6.00	10.00	14.00
7	.233	2.33	7.00	11.67	16.33
8	.267	2.67	8.00	13.33	18.67
9	.30	3.00	9.00	15.00	21.00
10	.333	3.33	10.00	16.67	23.33
11	.367	3.67	11.00	18.33	25.67
12	.40	4.00	12.00	20.00	28.00
13	.433	4.33	13.00	21.67	30.33
14	.467	4.67	14.00	23.33	32.67
15	.50	5.00	15.00	25.00	35.00
16	.533	5.33	16.00	26.67	37.33
17	.567	5.67	17.00	28.33	39.67
18	.60	6.00	18.00	30.00	42.00
19	.633	6.33	19.00	31.67	44.33
20	.667	6.67	20.00	33.33	46.67
21	.70	7.00	21.00	35.00	49.00
22	.733	7.33	22.00	36.67	51.33
23	.767	7.67	23.00	38.33	53.67
24	.80	8.00	24.00	40.00	56.00
25	.833	8.33	25.00	41.67	58.33
26	.867	8.67	26.00	43.33	60.67
27	.90	9.00	27.00	45.00	63.00
28	.933	9.33	28.00	46.67	65.33
29	.967	9.67	29.00	48.33	67.67
30	1.00	10.00	30.00	50.00	70.00
31	1.00	10.00	30.00	50.00	70.00

In the daily household notes should be entered the amounts of cash paid out and for what purpose, occasionally the prices paid for certain articles, reports to the Health authorities of the milkman, butcher, etc., and near the beginning of the month the dates of payment of monthly bills of preceding month.

Settlement can be made about the fourth of each month (sooner, if the monthly bills have all been received). The husband should then give the wife checks or cash to pay these last month's bills, and the monthly savings can then be divided as shown in form.

Husband's Accounts and Personal Expenses need not be kept at all, except for general information and satisfaction; they are not necessary for efficiency. However, they are generally kept.

The husband need not give the wife extra money in advance for the small cash amounts she pays for him. It is usual for her to place it on the form or to write dealer, article, and amount on a little slip of paper, place it with her cash as though it were actually cash, and then get the cash from him at the end of the month or earlier if convenient.

The property form is to be used only once each month, on the first. Many wives do not know how many spoons, forks, plates, etc., they have. A servant very soon learns this, and all servants are not too honest to take away with them a few articles from time to time. It is customary to arrange the items alphabetically, and make a separate entry for each different set of articles, even if of the same name. In the "Notes" are entered where the articles can be found.

Thus, the entry for the tea spoons would be

Spoons, Tea		
Silver, K. S. N.	12	Trunk 12
Silver, K. S.	10	S 8, Kn 2
Plated	9	Kn 9

HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement	
HOUSEHOLD	
Grocer	.....
Butcher	.....
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Cash	.....
Total	.....
Charity	.....
Papers	.....
Rent	.....
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Total Ex.	.....
Income	.....
Expenses	.....
Clear	.....
Bank	.....
Husband	.....
Wife	.....
Total	.....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement	
HOUSEHOLD	
Grocer	.....
Butcher	.....
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Cash	.....
Total	.....
Charity	.....
Papers	.....
Rent	.....
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Total Ex.	.....
Income	.....
Expenses	.....
Clear	.....
Bank	.....
Husband	.....
Wife	.....
Total	.....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191...

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement	
Household	
Grocer	.....
Butcher	.....
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Cash	.....
Total	.....
Charity	.....
Papers	.....
Rent	.....
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Total Ex.	.....
Income	.....
Expenses	.....
Clear	.....
Bank	.....
Husband	.....
Wife	.....
Total	.....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Butcher			Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
Grocer .....
Butcher .....
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Cash .....

Total .....

Charity .....
Papers .....
Rent .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Butcher			Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
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Cash .....

Total .....

Charity .....
Papers .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Butcher			Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
Grocer .....
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Cash .....

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Charity .....
Papers .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
Grocer .....
Butcher .....
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Cash .....

Total .....

Charity .....
Papers .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
Grocer .....
Butcher .....
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Cash .....

Total .....

Charity .....
Papers .....
Rent .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement	
HOUSEHOLD	
Grocer	.....
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Cash	.....
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Charity	.....
Papers	.....
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Total Ex.	.....
Income	.....
Expenses	.....
Clear	.....
Bank	.....
Husband	.....
Wife	.....
Total	.....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Butcher			Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
Grocer .....
Butcher .....
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Cash .....

Total .....

Charity .....
Papers .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Butcher			Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement

HOUSEHOLD
Grocer .....
Butcher .....
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Cash .....

Total .....

Charity .....
Papers .....
Rent .....
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Total Ex. .....

Income .....
Expenses .....

Clear .....

Bank .....
Husband .....
Wife .....

Total .....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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HOUSEHOLD EXPENSES FOR MONTH OF ..... 191..

Day	Charged by: Grocer	Charged by: Butcher	Charged by:	Charged by:	Total Charged	Charged to date	Cash Paid Out	Cash to date	Total Expense to date	Allowance to date
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Settlement	
HOUSEHOLD	
Grocer	.....
Butcher	.....
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Cash	.....
Total	.....
Charity	.....
Papers	.....
Rent	.....
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Total Ex.	.....
Income	.....
Expenses	.....
Clear	.....
Bank	.....
Husband	.....
Wife	.....
Total	.....

DAILY HOUSEHOLD NOTES FOR MONTH OF ..... 191..

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PERSONAL EXPENSES FOR MONTH OF ..... 191..

Day	Charged			Paid cash			Daily Notes
	Dealer	Article	Amount	Dealer	Article	Amount	
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2							
3							
4							
5							
6							
7							
8							
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							Saved (or spent extra) .....

Summary

Clear at end of last month .....
Received during the month:
House Savings .....
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Total .....

Expenses during month
Cash paid out
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Total .....

Clear at end of month .....
In bank .....
Cash .....
..... owes me .....
..... " " .....

Total .....

HUSBAND'S ACCOUNTS FOR MONTH OF.....191..

Day	Charged to Him			Paid Cash for Him			Daily Notes
	Dealer	Article	Amount	Dealer	Article	Amount	
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Summary

Charged .....
Cash .....

Total .....

Husband will pay:

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Husband gave me checks to pay:

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Husband gave me cash to pay:

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Self .....

Total .....

PERSONAL EXPENSES FOR MONTH OF ..... 191..

Day	Charged			Paid cash			Daily Notes
	Dealer	Article	Amount	Dealer	Article	Amount	
1							
2							
3							
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							Saved (or spent extra) .....

Summary

Clear at end of last month .....

Received during the month:

House Savings .....

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Total .....

Expenses during month

Cash paid out

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Total .....

Clear at end of month .....

In bank .....

Cash .....

..... owes me .....

..... " " .....

Total .....

HUSBAND'S ACCOUNTS FOR MONTH OF.....191..

Day	Charged to Him			Paid Cash for Him			Daily Notes
	Dealer	Article	Amount	Dealer	Article	Amount	
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Summary

Charged .....
Cash .....

Total .....

Husband will pay:
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Husband gave me checks to pay:
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Husband gave me cash to pay:
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Self .....

Total .....

PERSONAL EXPENSES FOR MONTH OF ..... 191..

Day	Charged			Paid cash			Daily Notes
	Dealer	Article	Amount	Dealer	Article	Amount	
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Total .....

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Cash paid out
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Total .....

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Total .....

PERSONAL-EXPENSES FOR MONTH OF..... 191.

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Charged	.....
Cash	.....
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Husband will pay:	
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Husband gave me cash to pay:	
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Self	.....
Total	.....

PERSONAL EXPENSES FOR MONTH OF ..... 191..

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LIST OF PROPERTY 191..

Article	No. On Hand When Checked												Notes
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LIST OF PROPERTY 191..

Article	No. On Hand When Checked												Notes
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CHAPTER IX

MARRIED SEXUAL LIFE

General Ignorance: There is more ignorance on this vital condition of married life than is generally imagined. If a man from Mars casually walked in to the home of a newly married couple and asked questions about the most sacred state of married life, he would learn that the groom knew almost nothing of the laws of nature as regards sex, and that the bride was entirely ignorant of the laws of nature and of the facts concerning the action of her own reproductive organs.

Male: At the beginning of married life, the husband must be the teacher. He must be kind, gentle, and affectionate. Generally, he knows about the act of sexual intercourse. Cases are known where the husband is ignorant of his part of the act, but these cases are very rare. He may never have had sexual intercourse, but the discussion of sexual subjects is not secret among men, and he could hardly fail to have learned a great deal. The male sexual organs are exposed to view, and the habits of the male are such that no mystery has surrounded his productive organs. He handles them every day. In youth he goes in swimming, entirely naked, with six or a dozen other youths. If he attempts to be modest, he is ridiculed. In school and college, the rooms are common; and nakedness in the boarding house, the gymnasium and the shower bath, is a matter for no comment. After maturity, sexual matters are discussed openly among unmarried men. Often visits are paid to women of bad character, for immoral purposes, or purely to satisfy curiosity as to the female sex. So it may be safely decided that the young husband is fully acquainted with the reproductive organs of both man and woman.

Female: On the contrary, the wife generally knows very little. It is true that there is a certain amount of discussion among women of the lower classes, but even this is vague and indefinite. No single woman is willing to acknowledge too thorough acquaintance with such matters for fear that this may create the impression of actual experience, which would probably be correct. The single man, on the contrary, even if continent, desires among men to create the impression of being immoral, for it does not detract from his prestige, and often adds to it.

Married women likewise avoid the discussion of such subjects; it is considered improper and vulgar. Little girls never undress and go naked before each other; they are taught otherwise. They never handle their sexual organs. At school and college, conditions are entirely different from that among boys. Girls rarely discuss such matters; there is practically no nakedness. It is safe to say that girl roommates seldom if ever see each other completely undressed. After maturity, sexual matters are not discused among unmarried girls; this is considered vulgar .

Before marriage, the girl's mother, if living, tries to tell her as much as she knows about sexual relations; but this information is meagre and generally erroneous, being based on similar misinformation from an ancestor, and on experiences not thoroughly understood. So it may be safely be decided that the young wife is only vaguely aware of the actions of her own reproductive organs and has practically no knowledge of those of her husband.

MARRIAGE RELATION

Reproductive Organs: It is useless to describe the male organs of reproduction. The semen is composed of granules from the testicles, (becoming spermatazoa in the seminal vesicles) and an unexplained but seemingly necessary secretion from the prostate gland. The spermatazoa are the living germs in the semen. They are shaped like a worm with a large head, the body forming their means of locomotion. They travel always straight forward, at the rate of about an inch an hour. They thrive in a warm fluid, but are killed by water nearly boiling, say 180° F., sudden cold, prussic acid, strychnine, permanganate of potash, and alcohol. The male organs of a grown man are generally completely developed, and if their effectiveness is marred in any way, it is not evident without examination. The fact that the semen is produced in the regular way in an average or unusual quantity is not proof that it is of effective quality; microscopic examination of such semen in many cases has shown that there were no spermatazoa, and consequently reproduction was impossible. This accounts for so-called barreness of many wives, which is really impotence of the husband who is seemingly not at all so. Contact with the female under proper conditions will cause an erection in the normal male. As this erection is

all that is necessary for copulation, the normal male easily performs his share of the act.

The female organs of reproduction are not completely understood, but such understanding is not necessary. Briefly, the female ovaries correspond to the male testicles; the ova from the ovaries correspond to the seminal granules from the testicles and the Graafian vesicles assist to develop these ova by action similar to that of the seminal vesicles in the male. However, while the male has only one center of excitation, the female has three, the vagina, the clitoris, and the nipples of the breast. The ova of the female must be fertilized by the spermatazoa from the male in order to produce offspring. This is described later. The female organs are not generally well developed at marriage, the clitoris being thin and narrow, and the walls of the vagina being pale and sickly looking. The ovaries are generally fully developed. And except during pregnancy and nursing, one ovum (sometimes two or three) are developed and pass out into the womb. Erection of the female is difficult to obtain at first. It is by no means spontaneous as in the case of the male.

Judgment and Consideration Necessary: As stated, the male is experienced in practice or in knowledge, and he generally has to make all of the advances. By nature, also, the male is aggressive and the female quiescent. Likewise the training of the two is to this effect. So much is this true with the female that many women think it is immoral to show any desire for intercourse with their husbands even after several years of married life. This is all wrong, as will be explained later.

The husband experiences no difficulty in obtaining an erection. Through manly aggressiveness, it is natural; likewise it is necessary for further procedure in the act of sexual intercourse. Erection on the part of the wife is not necessary for intercourse, but it is advisable if the act is not to be really distasteful. As the wife is inexperienced, the husband must employ caresses, as are pleasant between lovers but are often omitted as unnecessary after marriage. The husband's efforts to arouse the passion of his wife should be more or less prolonged. As one author has stated: "The husband should actually seduce his wife." Of course, this is not a necessity. The wife will permit intercourse because she feels it to be a duty, but her love for her husband is increased

or decreased in accordance with the effectiveness with which he arouses her desires for intercourse. No normal husband need fear that he will too greatly arouse the passions of his wife.

The male being the aggressor, it is necessary that he proceed at least the first time with delicacy and consideration. The feminine canal is partly closed with a thin membrane, called a hymen, and it is often necessary that this be stretched or ruptured before complete intercourse can take place. As the rupture of this membrane is attended with pain, the wife looks forward with dread to the first act of intercourse. Extreme lack of consideration causes nervous shock, which in extremely sensitive women may result in real sickness. Quite often, the hymen is not naturally grown, or it has been ruptured by a fall or accident, and sometimes the male organ can enter without rupture. The absence of a hymen is not proof of lack of virginity, though men generally think so. Artificial ones have even been been made.

Assuming that the husband uses every proper means to make intercourse a pleasure to his wife, it still remains a fact that many women are unwilling or unable to express any satisfaction in it. It is safely estimated by those who know that about 15 per cent of wives derive no satisfaction from intercourse. It is almost impossible for such a woman to retain the love of her husband and to be happy in her marriage.

This brings up all the question of the marriage relation. It is a broad subject and will be discussed only briefly. It may be clearly stated that no marriage between young people will be happy without proper sexual relations. The two may marry without any desire or intention of having children; they may even before marriage have no passionate tendencies toward intercourse, yet no man or woman will marry one of the opposite sex if it is known that her or his sexual organs are impotent. Too many wives do not realize the importance, the necessity to their happiness of proper intercourse with their husbands. Many wives come to me and complain that their husbands do not care for them, that they care for the company of other women, often for immoral purposes. Yet these same women are very much shocked when I tell them plainly that it is generally their own fault, that they are like a dead weight in the most evident expression of their love, and that their previous training is altogether wrong in de-

claring such expression to be immodest. The love of a husband cannot be retained by beauty in form of dress, by good cooking, or by multitudinous evidence of care and solicitude, if the mainspring of such love be missing.

The above attitude of the wife is often due to her intentionally failing to perform her part in the vain hope that by so doing she can avoid conception, and the consequent pains of child birth, with the following worries and care in bringing up the child. There is practically nothing in this idea. It is a known fact, there are no doubts whatever, that concurrence of the wife is not at all necessary to conception. Women have conceived while asleep, hypnotized, unconscious, and under drugs during intercourse. The spermatazoa from thoroughbred studs of great value have been used to impregnate four to eight mares with one emission from the stud, and the seminal fluid has even been shipped to a distance for that purpose. Inanimation of the female does not prevent conception; it should be avoided, as it only causes unhappiness to both parties. Further, any such inanimation by the wife causes congestion and sickness of the female generative organs.

Husbands often can, by care and judgment, prevent such errors in their wives. Many husbands have asked me for advice, have told me that their wives are cold, that they feel that they are imposing upon their wives. My advice has invariably been to the effect that their wives are acting in accordance with the training of 20 or more years of ignorance and modesty, and that the husbands must train them to obey now the natural instincts.

PHYSIOLOGY OF CONCEPTION

During the act of copulation, the semen from the male is spurted into the vagina of the female. This semen contains the spermatazoa, and these little germs have such life and power of locomotion (one inch per hour) that they spread themselves through the whole of the interior of the feminine generative organs. They have been found alive throughout the entire generative tract, and some say even alive on the surface of the ovaries some days after intercourse, though this is doubted. They may live six or seven days after emission.

Fertilization: In order to produce conception, one of these spermatazoa must fertilize an ovum in the proper condition for fertilization. The ovum is developed during menstruation, and possibly for a certain number of days after menstruation. The average duration of menstruation is four days, though it may habitually last seven days and not be abnormal. Fertilization must take place during or shortly after menstruation because it is then and only then that the ovum is in condition for fertilization.

The exact time and place of fertilization are not clearly understood, and physicians do not agree. The best authority is of the opinion that fertilization can only take place in the womb or just at the edge of the Fallopian tubes which form the passage of the ova from the Graafian vesicles to the womb. The ovum does not enter the Fallopian tubes until menstruation has ceased, and it is not properly opened for impregnation until it enters these tubes. The ovum is very small, about 1/120 of an inch in diameter, but its passage through the Fallopian tubes is indicated by obvious signs, more or less acute. Generally about two (sometimes as late as ten) days after menstruation, there is a sensation of weight and uneasiness in the Fallopian tubes, across the abdomen on a line with the lower edge of the hip bones. This marks the passage of the ova, and some females can really feel a kind of drawing on the tube as it forces the ova along .

When the ovum reaches the womb, it is kept there by a kind of membrane for several days, and it is then that fertilization generally takes place. In about five days it dies, passes out of the womb, and is discharged. This can also be determined. The first indication is an increased flow of watery fluid from the vagina, sometimes pink, but generally colorless and like the white of an egg. After a few hours, or sometimes a day or two, there is a slight contraction and pain in the womb, with a feeling of weight and bearing down, followed by the escape of a small grayish clot, somewhat firm and elastic. This clot is opaque and about the size of a pea; it contains the membrane and ova.

The Jewish law requires that no sexual connection take place during menstruation or for seven days thereafter. As the Jews generally obey their laws, it is evident that fertilization can take place seven days after, or possibly for two days before menstrua-

tion. Some eight or ten doubtful cases have been reported of conception 20 days after menstruation.

The popular idea among women that menstruation after sexual connection shows no conception is slightly in error. Menstruation several days after sexual connection is probable evidence of no conception. A second menstruation after sexual connection is more positive proof of no conception; but not final, as some few women menstruate during pregnancy. That these facts are understood by the lawmakers is evident. The average time for delivery after ceasing of the last menstruation flow is 278 days. Yet we find that in France a child is legitimate if born 300 days after death of its father; in Prussia, 302 days; in this country, practically the same.

It must not be supposed that fertilization will take place every time there is intercourse in the time limits as stated above. The contrary is the actual case. The conditions must be exactly suitable, and the meeting of spermatazoa must take place in exactly the right way. As the ovum is not always in just the right position, and as the spermatazoa always proceed straight forward, and never turn back, it is to a certain extent a matter of luck if fertilization does take place. Likewise, even if both husband and wife are anxious to produce offspring, their efforts are not often successful in the first months of marriage. The mouth of the womb is very narrow, or the female organs may be undeveloped and do not acquire their full power for several months. Not often are children conceived within three months after marriage, and this is greatly due to lack of development in the wife. In 556 cases investigated, the most frequent epoch of first impregnation was found to be between ten and fifteen months after marriage.

Avoidance of Conception: There is a United States law against giving information to aid in preventing conception. This law is really injurious in its results, because it is responsible for a lot of female troubles and is of no real benefit. Every woman has inherited some foolish methods for avoidance, and she tells her daughter, with results injurious to her daughter, resulting in the so-called mysterious female troubles, which are really nervous affections or actual injuries of the walls of the womb or vagina caused by improper intercourse or vain attempts to prevent conception.

The arguments in favor of this law are:

1. "It promotes increase of children".

This may be true among the poorer classes, but it is not true among the richer classes because so many of them try all kinds of preventive schemes with injury and final impotence. In other words, this law possibly results in increase of the least valuable children.

2. "It is according to the teaching of the Bible." I have never been able to find that this is true.

The arguments against the law are clearly stated by the Critic and Guide (a medical journal) Mt. Morris Park, New York, which is trying to have it repealed:

1. Families would be happier if they could regulate the number of their offspring.

2. Young people are restrained from marrying from fear of many children.

3. Thousands of young men, because unmarried, have ruined themselves by contracting venereal diseases.

4. Women often become invalided by too frequent child-bearing.

5. Women often become incurable invalids as result of improper attempts at prevention.

6. Many men often injure themselves likewise as result of improper attempts at prevention.

7. Many women kill themselves by abortions.

8. Children do not receive proper care, because there are often too many in family.

9. Children are often physically and mentally weak because not desired by their mother.

10. Children often should not be born at all because of the inheritable weaknesses of their parents.

11. Human beings are not animals; they should have the right to regulate their own offspring.

12. The law is due to mistaken prudery; it results in much misery, with no compensating good.

Although this law is not known by many people, it is followed by reputable physicians, who are among the few men in this country who obey a law because it is a law. As long as the majority of the people believe that many weaklings are better than

fewer strong persons; that is, as long as quantity of population is preferred to quality, this law will work harm. It will not be repealed until the people force their Congress to repeal it. It is true that disreputable physicians will freely furnish so-called schemes for prevention; but these schemes are injurious. These injurious methods are many, and they are enumerated below solely to show what they are, their effects, and to prevent unwise women from making use of them. If a physician prescribes any of these methods, it is a certainty that he is not reliable (very few know the only proper method), and his advice should not be taken, as it will surely result in the injuries indicated.

Premature withdrawal is bad for the man, being little worse than masturbation; the semen acquires a habit of continual discharge and wasting away; it finally results in impotence, or an unfaithful husband who goes elsewhere for results not so distasteful and unnatural. It is also bad for the woman, causing congestion and nervous troubles. Finally, it is still possible to have conception, as the spermatazoa are very active and sometimes reach the womb, after all.

Condoms have about the same effect on the man as masturbation, except possibly the nervous injury is a little diminished. Again we find the husband is disgusted and becomes unfaithful. The effect of condoms on the woman is the same as premature withdrawal. Condoms often break, quite often with results ineffective as regards avoidance of conception.

Pessaries (stoppers), sponges, etc., do not catch all of the spermatazoa, of which there are millions. Such intercourse is abnormal, and utterly useless as a preventative.

Hot water injures the lining of the vagina and womb; likewise the spermatazoa are in the folds of the vagina or womb and are never all destroyed.

Acids such as permanganate of potash, alcohol, or boracic acid, injure the lining of the vagina and womb much more than hot water; with results not effective as regards prevention.

It is a sad commentary on our civilization that a family cannot decide as to its offspring. The above methods injure sometimes the husband, invariably the wife, and often the child—for sooner or lates conception does take place, and the unborn child is nourished in a weakened womb. There are dangers to the

mother in this condition, for flooding and other disorders of childbirth are often traced directly to so-called methods of prevention. One of my friends decided that the best scheme was to have the selected number of children; and then let herself be injured, thereby preventing conception. This did not work, as conception was finally not prevented, and she had a very difficult time because of the self-inflicted injuries.

Abortion: After the child is conceived, the fear of pain, danger, and trouble often leads the wife to take steps to produce an abortion. Quacks flourish and grow rich on such wives. Many socalled harmless remedies for that purpose may be seen advertised in thin disguise. They are never harmless. Their effectiveness depends upon a disarrangement of the feminine organs by instruments or by violent retching or such as would be produced by a sudden fall from a great height. Invariably, they injure the woman, and in many cases produce permanent malformation, and even death. Penalty for such practice is very severe to the practitioner, and consequently no honorable physician will indulge in such practices. I have no intention of preaching a sermon, but I advise a wife not to attempt to rid herself in an unnatural manner of a conceived child. The idea that childbirth is very dangerous, is erroneous. It is painful, but seldom fatal; in fact, with proper care, such a result need never be expected. If a woman is healthy, she need not fear childbirth. There are many feminine complaints, some imaginary, some real. The real complaints are caused generally by unnatural practices either during intercourse or after conception, or by disease innocently transmitted by the man himself. Excepting these two causes, the health of women is so excellent that it is evident that the Almighty never intended that they should worry men and themselves with mysterious feminine troubles.

PRE-DETERMINATION OF SEX

This matter is not definitely settled, but enough is known to be of value. The greater part of the theories on this subject are worthless. For example, many believe that the absence of one testicle or one ovary will insure either all boys or all girls, as the case may be; but this has been disproven because men with only one testicle and women with only one ovary have produced both boys and girls. Others believe that by lying on one side or the other

during intercourse, the sex of offspring may be influenced; but this is also absurd. It is found that there are certain rules which are at least fairly effective. Scientific explanation is made for the results attained, but the explanations are not satisfactory.

Rules: The following rules will generally insure the desired sex in the offspring:

To obtain a girl, have intercourse within two days before or after menstruation. Also, the mother should acquire vigor by strengthening food, avoidance of fatigue, etc.; while the man should do just the opposite.

To obtain a boy, have intercourse six days or more after menstruation. Also, the father should acquire vigor by strengthening food, rest, etc.; while the woman should be tired and exhausted.

Conditions will vary with different people. For example, with some women, avoidance of intercourse until ten days after menstruation will result in no children ever. However, in general, the above rules hold good. Certain facts prove this; the children of farmers are generally boys, because the fathers are generally strong and vigorous while the mothers are weak and tired with much work; in cities, the majority of the children are girls, because the fathers have little physical strength and the mothers are strong and vigorous as the result of no fatiguing work; the children of laborers are generally girls, because the fathers are tired and the mothers are not overworked. Physicians prescribe certain foods, as a result of experience, but investigation shows that the only value of such food lies in its weakening influence on the mothers if boys are wanted and the reverse, if girls are wanted.

BARRENNESS

Causes in Male: The following are stated to be causes of impotence or barrenness in the male: Physical Defects, Self Abuse, Nightly Emissions, Over Indulgence, Venereal Disease. Some of these really produce impotence, but in the majority of cases, the prevalent ideas are much exaggerated.

As nine cases out of ten of barrenness in marriage are due to impotence of the husband, all young men should be examined before marriage to see if they possess the vital germ. If they do not, they have no right to marry, and condemn their wife to

childless existence. Any reputable doctor can examine the semen. One or two drops placed in proper solution under a microscope will settle the question. If not impotent, the microscope will at once disclose many little spermatazoa running around vigorously. The germ is very small and looks very much like a tadpole with its large head and threadlike body.

Physical Defects: The semen of the male comes from the testicles, via the seminal vesicles and the prostate gland. While it may be possible that the last two actually furnish necessary ingredients of the vital semen, there is no doubt that the testicles furnish such necessary ingredients. Removal of the testicles is sure to cause barrenness; disease of the testicles will probably cause it. It is a fact not generally understood that men without testicles can have intercourse in a seemingly normal way, and discharge semen of form and color practically indistinguishable from the vital semen, yet such discharge lacks the vital germ.

Few cases of barrenness are due to normal physical disability. There are such cases however. Testicles may be lacking at birth; they may have been injured, or even removed because of injury. Often their effectiveness is destroyed during an attack of "mumps", but this seldom occurs in both testicles. The testicles are unusually well protected by nature, and injuries or "mumps" very rarely do real damage.

Self Abuse is loudly proclaimed as a cause of impotence. Many surgeons and ministers make positive assertions to this effect. The facts do not altogether bear out their statements. Self abuse is bad, very bad, for the boy or man, both morally and physically, but the greatest danger from self abuse lies in its convenience and in the consequent repeated indulgence of it. Although generally asserted to the contrary, there are not many boys or men who indulge in this habit; and even where it has been done, the indulgence has only lasted during the more active sexual period from 15 to 25 years of age. There seem to be few if any well-authenticated cases of impotence from self abuse, but there are many well-authenticated cases where impotence was not caused by self abuse. Those who are guilty of self abuse are naturally a little weak in mind and body. No self-respecting male will be guilty of such practice, and the mental and physical weakness so often pointed out as the result of self abuse is really in the

beginning the cause of such self abuse. If such a weak individual be married to a similarly weak wife between 15 and 25 years of age, there is practically no doubt that their lack of self-control would lead them to practices during their first year of married life which, except for a serious physical nervousness, would have all the effects of self abuse.

Nightly Emissions: They are practically harmless, yet they are very widely advertised by all quacks as an unfailing cause of impotence. Quacks are perfectly sure that ignorant youths will be worried by this most natural condition, and will come for relief. If the truth were fully known by all young men, not one would be more alarmed by nightly emissions than is a young girl by her menstruations. Naturally, too many such nightly emissions are physically weakening; but any young man so alarmed need only consider if he would be alarmed if the same number of times had been spent with a female. If the number is still alarming, he should quit sleeping on his back, and should exercise very strenuously every day. In the extreme case, it may be noticed that, when straining during defecation, a kind of thick liquid exudes from the penis. This is not the vital semen, but only a secretion from the prostate gland, and its presence is no sign whatever of present or future impotence. The natural cure is marriage.

Over Indulgence in liquors or in sexual intercourse may sometimes cause impotence; but such cases are extremely rare. Over indulgence in intoxicating liquors may cause a weakening and breakdown of the whole system, and the sexual organs will be wrecked temporarily or permanently along with the others. Sexual weakness is made more evident in such cases, because a chronic alcoholic will consider his health fairly good after his digestion has refused to work, after his nerves are gone, his blood thin, his heart weak, his muscles flabby, but will be wildly alarmed if his sexual organs refuse to perform their functions. As a matter of fact, these organs are the last to weaken, and will very quickly become normal if the male will give them a chance. In cases of sexual over-indulgence, if a man's sexual organs are abused, overworked, maltreated, they refuse to work; but if treated properly before being utterly ruined, and it takes a great deal to ruin them, they will promptly resume their normal function. As sexual intercourse twice a week is enough for a normal man

over 25, and once a week for one over 35, it is easy for a man to judge as to his over-indulgence, and mend his habits accordingly.

Venereal Disease is the primary cause of impotence in the male. Generally, he will not acknowledge it, and will preferably admit over-indulgence, nightly emissions, or even physical disability; but the fact remains that nearly all cases of impotence in the male are caused by gonorrhœal infection. Syphilis does not cause impotence. It would be very fortunate for the human race if it did. Gonorrhœa does not at once, or generally, cause impotence —but impotence is itself relatively rare, and cases of gonorrhœa are not uncommon. If a man contracts gonorrhœa, he is fortunate if it does not affect the prostate gland. But if the prostate gland is affected, the disease may remain for one or more years. In many such cases, the germ travels along the tube leading to the testicle, causes swelling of the testicle and much pain, with outward symptoms exactly like that of "mumps". When the swelling has ceased, it is found that in 60% of the cases, this tube is stopped and no vital semen can leave that testicle. If both testicles are thus swollen, it is a case of double epididymitis, and impotence may result.

Causes in Female: The following are stated to be causes of sterility or barrenness in the female: Physical Inability, Self Abuse, Unnatural Intercourse, Venereal Disease. In general, it may be stated that as in the male, the prevalent ideas of the causes of barrenness are much exaggerated.

It seems useless to advise a young woman to be examined for barrenness before she is married. There is no examination as positive in its results as the search for live spermatazoa in the male semen. Also, women generally will not be so examined.

Physical Inability: Such defects are more often a cause of barrenness in the female than in the male. The ovaries of the female may be missing, or may not properly perform their functions; but the most common defect is that the entrance to the womb is so small as not to easily admit the semen. This physical defect is very rarely found. If a surgical examination shows the organs to be normal, then, in view of the very few known cases of sterility due to physical defects, it may generally be decided that the cause of such sterility is to be sought elsewhere.

Self Abuse has the same effect on the female as on the male. It is weakening mentally and physically, is indulged in only by those who are already weak mentally and physically, but does not often cause absolute impotence.

Unnatural Intercourse causes congestion of the organs of the female. Quite often, this congestion causes disarrangement of the organs, swelling, etc.; all because the natural intercourse is prevented or even delayed. When the woman learns fully that such schemes are useless in results, and only productive of physical discomfort and sickness, she will cease being so foolish. As previously stated, about 60 per cent of woman's nervous troubles, especially insomnia, are due to sexual weakness, and unnatural intercourse is the worst cause of this nervous weakness.

Venereal Disease in the woman, as in the man, is generally the cause of her sterility. Syphilis is not a cause of sterility. Its effects are frightful; but very rarely does it cause sterility, and then only after many years. Gonorrhœa is the one disease to fear. In a man, it is really not productive of much discomfort, but the germs remain for many months after all discomfort has ceased, though all germs may eventually be destroyed. In a woman, gonorrhœal infection is a disaster unless treated very quickly. The germs get in the folds of the vagina, and it is difficult to get rid of them all. Slowly but surely, the germs during childbirth or monthly sickness, find their way into the womb, the Fallopian tube, and the ovaries. Eventually, barrenness may result. At any rate, disease remains, and it is not inaccurate to state that 60 per cent of the mysterious female diseases which are a matter of pride to silly women and despair to men, are caused by some gonorrhœal infection or remotely inherited weakness proceeding from such infection; the other 40 per cent are due to unnatural intercourse or unnatural practices to prevent conception. None are due to constitutional female weaknesses.

Conclusion

If both man and wife are normal and healthy before marriage, if they follow natural laws, use judgment, and endeavor to promote harmony and the happiness of each other, their married sexual life will be a pleasant one; and this means that their married life will be a pleasant one, for the sexual life is the controlling

factor for happiness in marriage. Failure to follow the common sense rules above described, will lead to unhappiness, to hospitals, and to divorce courts.

For more detailed information, read
The origin of Life—Hollick, price $2.75.
Woman—Tolway—price $3.00.
Sexual Life of Our Times—Bloch—price $5.00.
Creative and Sexual Science—Fowler—$2.00.

CHAPTER X

PREGNANCY AND CHILDBIRTH

General Remarks: Nearly every wife has a general idea of the care necessary in pregnancy and childbirth. In almost every case, she has heard mother or friends tell of the fearful dangers and pains accompanying this most natural function. As a consequence, she looks forward with dread to the event in her own case.

This more or less misleading knowledge has an advantage and a disadvantage. The disadvantage lies in the fear which it causes to the inexperienced wife, often leading her to injure herself in her attempts to prevent conception or delivery, and invariably causing her to become more or less ill as a result of nervousness. The advantage lies in the fact that she is so impressed with the dangers and pains attendant upon delivery, that she will make the necessary efforts to secure proper attendance and assistance in the event. As a matter of fact, this attendance and assistance is very necessary, but it is necessary for the safety of the child far more than for the mother. Almost any ignorant woman could take fair care of the mother; it requires a skllful physician to see that the child is properly and carefully delivered, so that it will live and during life be not injured or deformed as a result of ignorance during delivery. Emperor William of Germany has a shrunken left arm as a result of the ignorance of some one in allowing his mother to go on a journey at a critical time, with the result that the delivery was accomplished by an ignorant country physician, and Emperor William is still suffering because of such ignorance.

No one denies that childbirth is painful and sometimes dangerous to the mother; every husband is fearful that in his wife's case, it will prove fatal. It is, however, a fact that the deaths of mothers during childbirth averaged during the year 1910 only 1 in 970; the deaths of children in birth averaged 1 in 220. In nearly every case of death of the mother, it was due to improper precautions or natural weakness, and it is now pretty well established that the probability of death, after proper precautions, is about the same as the probability of death in a steamship trip across the Atlantic Ocean. The probability of death of the child is somewhat greater, but still not great enough to cause heartrending anxiety.

PREGNANCY

Description of Organs: The child is conceived in the womb, which is a pear-shaped organ, about three inches long, two inches in diameter at the upper end, and one inch in diameter at the lower end. During delivery the child passes from the womb, into the vagina, and out through the mouth of the vagina. In its progress, it passes through the upper and lower straits of the pelvis.

The vagina is three to five inches long, and one and a half to two inches in diameter. Naturally, before childbirth, it and the womb are much distended. The extreme distension of these organs during labor is generally quite painful, but during pregnancy they are already naturally enlarged considerably. The mouth of the vagina acquires a quality of distension far greater than is deemed possible before the necessity exists therefor.

The bones of the pelvis form a couple of narrow openings through which the child must pass. These openings are called the upper and lower straits, though the upper strait is the only one which is worthy of the name. It is almost a circle, having four distinct diameters or distances across, which are four, four and a half, four and a half, and five inches across in the normal female. The lower strait is really limited only by the end of the spine; and as this will relax, easily in a young person and with difficulty in an older one, there is no real difficulty experienced with this strait. . .

The largest part of the child is the head, which has various diameters; five inches across the unusual diameter, four inches across three other unusual diameters, and three or three and a half inches across the other six diameters. The child generally is in such a position that it is delivered by its head along the three inch diameter, which makes it very easy to pass the pelvic strait. However, in case it is coming even by the five inch diameter, which chance is about 1/10 mathematicallly and about 1/1000 actually, its head is so composed of bones and cartilages that the pressure on the bones will cause them to overlap as much as is necessary. This is not well for the child, and it is often necessary that the child be turned by the physician in order to prevent too great compression. The shoulders and hips of the child are about four inches, but they are easily compressed to three and a half inches, without any danger whatever to the child.

In the womb, the child is surrounded by a sac containing the waters, one or two, called the false and the true. Until birth, the child is nourished by the umbilical cord, leading to the afterbirth, which is attached to the walls of the womb. This cord is about the size of the little finger, and contains an artery and two veins.

Examination before Marriage: Before entering into marriage, a young girl should have herself examined carefully to see if the pelvic straits are too small for safe delivery of a normal child. Be careful not to use Xrays; it is claimed that they injure the ova. If the pelvic straits are too small, she should not be allowed to marry. Not only is it impossible for her to give birth to a healthy child, but the danger to herself is great, and there are no ways to benefit her. If she is with child before she learns of this weakness, it is necessary to produce premature delivery, which saves her but results in a sickly infant, even if it lives at all. However, so very few girls have such small pelvic straits that it is impossible to expect any of them to undergo this examination.

Hernia is also dangerous. Any wife suffering from hernia should have same cured at once.

A tumor or a polypus is unusual, but not impossible. The wife should be carefully examined before and during pregnancy to discover any such sickness. An easy delivery is impossible, and a safe delivery not at all usual in such cases.

Signs of Pregnancy: There are many signs by which the conception may be determined.

The test of the blood is the only positive proof. Blood can be sent by a physician through the mail to a laboratory (see medical journals for names). The cost of test is $10.

Cessation of menstruation is almost invariably proof of conception. This is the most usual sign; but it has sometimes been known to fail, for cases are known where menstruation has continued several months or even up to delivery.

Medical examination of the urine will show almost positively the condition. A preliminary examination can be made at home. Place the urine in a glass and let it stand still. In two to five days, a layer of thicker matter will form on the top, like cream on milk. This layer may even be lifted off, sometimes. Presence

of this layer is not positive proof, as it may easily be confused with other similar substances; but its presence is enough to justify examination by a physician.

Movement of the child can be felt about the end of the fourth month. This is the first evidence of life, and is called the qnickening.

The heartbeats, or blood beats, of the child may be heard about the end of the fifth month. This beating may be heard more and more distinctly as time goes on. In case there are twins, two heartbeats can be heard.

At the end of the sixth month, the above signs are very distinct. This is also the time at which the law says the child is alive.

Quite often, the physician believes it necessary to feel the child in the womb, and move it, in order to be sure that the growth is not a tumor or a polypus. Generally such examination is unnecessary and absurd if other signs are evident.

Other signs, not so important or positive, are enlargement of the neck, circle around nipple of breasts becomes dark (about fourth month), breasts swell, head aches or becomes dizzy, appetite lessens or increases greatly, and there is general nervousness.

Intercourse during Pregnancy: Although many ignorant doctors and ministers have very fixed opinions on this subject, it seems to be a proven fact that intercourse during the first two months is not at all harmful. The wife should be the judge of this. Sometimes, it is absolutely necessary; and tends greatly to reduce the nervousness. If, however, such desire becomes abnormal, it will be necessary to take other measures to reduce this nervousness. Intercourse after the fourth month is always injurious to the child.

It is thought by many that intercourse at this time tends to impress the character and personality of the husband on the child, though this has not been proven. It is even claimed that such intercourse will result in a male child; but there seems to be absolutely no proof of this supposition; in fact, study of this claim leads one to conclude that there is no basis for it. It is probably based on the fact that a man who has such intercourse is usually hard to control sexually, and is one of those who are more apt to transmit their qualities to the children.

Care and Attention: The whole physical being of the prospective mother seems to be concentrated on the sustenance of the child. All of her symptoms should be studied with a view to the ultimate effect of any sickness or weakness on the child, for any derangement which will affect the child will react on the mother. It is safest to prevent any possibility of sickness; avoid it. Some sickness seems to follow as a result of the wife's condition, and cannot be avoided. Generally, however, careful attention and proper exercise in the open air will render these so-called necessary sufferings of small moment. Two hours walking each day in the open air, unless such exercise is an effort, will work wonders on the mental and physical inherited weaknesses of a prospective mother.

Sickness and vomiting come on about the second month and last until about the fourth month. Mild and quickly digestable food is advisable, anything quickly digestable which can be retained (see Digestion Table—Chapter 1). Often a little light wine is of benefit.

The stomach and hips should not become chilled. Wear warm flannels in winter, and be sure to wear at least enough clothing in summer. Never wear corsets which bind at all; get others, or don't wear them at all.

Teeth seem to ache more or less. They should be examined to see that there is no decay. Such decay may cause trouble when there is not time to attend to it.

Irregularity of the bladder or bowels, constipation or diarrhœa, is not uncommon. This increases as the child grows, for the womb is between the intestine and the bladder, and presses on both. This irregularity should be relieved at once; but it is not advisable to take a powerful emetic, because the habit will be formed of depending on emetics, which will be inconvenient later. Exercise, care in diet, and proper mastication of food, are of more general benefit. Slowly digesting meats (see Digestion Table Chap. I) and alcoholic stimulants should be avoided.

Heartburn, palpitation, fainting, cramp, capricious appetite, a kind of longing for things more or less absurd, headache and dizziness, spitting blood, nose-bleed, varicose veins, and a number of other minor weaknesses develop, due to the fact that the whole energy is concentrated on sustenance of the child. Exercise, lack

of nervousness, and proper diet, should cure these quickly. If the weakness is at all serious, a physician should be called upon to prescribe. Nervousness should not lead to unnecessary alarms, nor should lack of care cause prolonged weakness or sickness. Baths at about the temperature of the body are very efficacious in cure of minor evils. Too much bathing, say more than once a day, is not generally advisable.

Flooding or hemorrhage of the womb is not uncommon, but is serious enough to require the presence of a physician. It is caused by too violent exercise, excessive fright, etc., too strong purgatives, or by attempts at abortion. It is more dangerous in the early months to the child than to the mother.

Abortion is premature delivery before six months; miscarriage is premature delivery after six months, or after the child can live. The causes are practically the same as in flooding; in fact, flooding so often causes an abortion or miscarriage that the two are discussed together in text books. The medicinal treatment is also practically the same. The danger to the mother from flooding is considerable, but strange to say, it is greater during the early months than later. Disease of the father, and also of the mother, especially gonorrhœa, syphilis, and inflamation due to unnatural intercourse are often causes of abortion or miscarriage. The danger is not less, and the trouble remains after the delivery, causing a second similar trouble, unless cured.

Death of the child quite often causes premature delivery, though this does not always follow. The child is sometimes retained for weeks or months after death, though this is unusual.

Treatment for abortion or miscarriage is practically the same as during childbirth; a physician is necessary.

CHILDBIRTH

Physiology of Childbirth: The pain of the mother during childbirth is very great. However, it is necessary that it be borne, and it is thought that the cries of the mother are results of efforts and are not exact measures of the real pain suffered. At any rate, in order to bring forth the child in the best possible condition, it is necessary that the mother assist in the delivery. The chances of death to the mother are very small. It is probably a fact that shortly after commencement of delivery, the physician

could remove the child without serious danger to the mother, but with sure death to the child. Of course, such delivery is bad for the mother, and sometimes her organs are disarranged, but a reputable and experienced physician will always save the life of the mother when her strength has given out, and the delivery cannot be accomplished. However, the mother should always bear in mind above all things that her assistance is necessary, and that she must keep up her courage and do her duty by the child at the expense of a certain amount of pain, with very little real danger.

German physicians have been experimenting for five years with a drug which causes the mother to become semi-unconscious, to feel no pain, and yet to assist in the birth of the child. It is claimed that the deaths are reduced to one third, especially with nervous women, that the pain is not felt at all, and that the child is not affected in any way. This experiment has about passed the experimental stage, after some 5,000 cases; it will probably be introduced into America at the most expensive hospitals.

The child in its passage from the womb to delivery does not follow a straight line. In animals and in the lower order of human beings, the course is a straight line, but it seems that the higher the organization, the more difficult the delivery. The seeming ease with which a savage woman is delivered is due to her organization, and not to any superior strength or contempt of pain. The path from the womb to delivery is a slight curve; and during this passage the muscles of the mother so contract with her assistance, that the child is almost invariably turned into the most favorable position for passage. It is even believed that the child by instinct helps to turn itself into the most suitable position for delivery. The time of delivery is divided into three more or less distinct periods, and generally lasts eight to twelve hours.

First period: The head of the child begins to push against the mouth of the womb. As this is not large enough, it has to be enlarged, and this is attended with considerable pain. After some time, the mouth of the womb is so enlarged that the womb and the vagina are practically continuous. The lower part of the bag or sack of waters descends into the vagina.

The sack of waters descends farther and farther into the vagina, until the pressure bursts it. The waters are discharged, and incidently lubricate the canal of passage for the child. The

head of the child at once closes up the passage at the mouth of the womb. Pains cease for a time, and there is some rest.

Second period: Soon the head begins to pass the mouth of the womb, pains become very acute as the head passes through the mouth of the womb and along the vagina. During this time, the the muscles are contracted and the child is turned by the mother, or turns himself, in the most favorable position in case he is not already in such position. The mother does not seem to be able to make great change in the position of the child, so if not coming right after such forward progress, say once in ten thousand times, it is necessary for the physician to assist in turning the child. It is probable that the greatest pain is experienced while the child is passing through the pelvic strait and along the vagina; and as there is no probability of any tearing during this passage, it is seen that the general impression that the mother is torn all to pieces and that this causes the pain, is erroneous.

When the head has reached the mouth of the vagina, it appears and recedes once or twice. This is a provision of nature to enlarge the mouth of the vagina gradually, and prevent tearing. If the mother is not careful in her efforts at this time, she will tear the mouth of the vagina, and injure the perineum or skin between the vagina and the rectum. Such tearing is very painful, and requires sewing.

In order to assist the mother in her efforts in bearing down or contraction of the womb and vagina to force the child along, a strong band or cord should be attached to the foot of the bed with the loop toward her. She should be moved down so that her feet will bear against the bottom of the bed. If a metal bed, some support should be placed at the foot for her feet. The loop should not be long enough to pass around her body, for fear she may rise up in it and throw herself to one side. The physician or nurse should support her back when necessary for strong effort. The mother should be told not to make any effort at all except during the pains. At other times, no progress will be made, and effort is wasted.

When the time for delivery arrives, the child will force its head through the mouth of the vagina, speedily followed by the rest of the body. Generally at the moment of birth, the face of the child is turned toward the back of the mother; that is, the child is is born face downward.

The umbilical cord should be tied twice, at about two inches or more (push the child's intestine back if it is in the cord) and about four inches from the child's body. It is then cut between these two points where it is tied.

Third Period: The umbilical cord is attached to the afterbirth and this is attached to the walls of the womb. In about half an hour, less severe pains begin, and the afterbirth is delivered. The cord should not be pulled hard to facilitate delivery, though a slight pull will assist.

If there are twins, there are two cords, and two afterbirths. The first child generally comes head first, and the second feet first. The birth of the second is attended with very little pain, as the way has been prepared. The second child is generally born immediately after the first, though sometimes it delays several hours.

Precautions: The above description is given fully, because it is thought that a wife will be able to see that there is no mystery, no great danger, and only common sense and endurance necessary in childbirth. It is by no means intended that this information should serve in place of a physician. A nurse is necessary, and a very good physician. There are so many complications in the first delivery that a wife should, regardless of expense, make arrangements for delivery of her first child under the care of a very good physician and in a hospital or in a home where every convenience is available. A useless saving of expense, and an unbecoming modesty, may cause lifelong regret to the mother and lifelong suffering or deformity of the child.

The umbilical cord is the most evident cause of danger to the child in a normal delivery. It has been known to sever limbs of the child, and if stopped before delivery, the supply of blood will be exhausted and the child will die. Therefore, although in only a few cases the physician is absolutely necessary, yet he should be present in order to prevent injury in these few cases; and his presence is a source of great comfort to the mother in her nervousness and distress.

The physician should always be required to treat the eyes of the child with Crede's nitrate of silver solution. This is primarily a precaution against gonorrhœal infection, which is remotely possible and may cause blindness when neither parent has gonor-

rhœa; but it is so good to prevent other weaknessess of the eyes that the State of New Jersey has made this treatment compulsory in every case.

Care of Mother: The mother feels great relief after delivery, and generally goes to sleep at once. There are certain other pains, except in first delivery, and these give trouble for several hours. But little solid food should be given for a day or two; the patient should be judge of this to a certain extent. The bowels and bladder should be kept clear.

There is kind of discharge from the womb, while it is returning to its natural position. This is a proper discharge and its absence indicates something wrong. It stops however during the milk fever, which is a slight fever lasting from about the second to the fourth day.

The mother should keep her bed for a week, until the womb has returned to its natural position. Often ten days or two weeks are necessary. She may then sit up; and walk around after two weeks or more. She should not, however, take any sustained exercise for a month, or until she has acquired full strength.

Nursing by the mother is preferable. It is good for the mother, and for the child.

For more detailed information, see *Origin of Life,* Hollick, price $2.75.

HEREDITY

After a baby is born, the parents generally look for inherited traits. Rarely does a couple, before marriage, exercise judgment as regards the probable inherited qualities of their children. However, such foresight would be justifiable, because it has been known for centuries that qualities are inherited, although only recently have there been careful statistics for the purpose of determining the rules of heredity. Unfortunately, scientists have been opposed to this theory until recent times; consequently, it has not made much definite progress. Likewise, misled by theory that by determined effort a person can make of himself whatever he wishes, ministers have opposed the theories of heredity. In modern years, however, all admit the laws of heredity and acknowledge that environment is an important factor only in development of inherited characteristics. Even so, scientists still differ as to the exact theory of inheritance. The discussion below

is based on the best information available. This information is the result of carefully compiled statistics with plants, animals, and human beings in large numbers:

Common Errors. Before discussing the theory, it is well to call attention to the fact that two common errors as to inheritance are practically disproven. No one has been able to put forward real authentic cases, although the reports of such cases are many:

First. It is impossible that a dead husband transmit characteristics through his wife to children born through the agency of a second husband, say, one year later. This is evident because the spermatazoa die, and cannot possibly have any effect on the woman or on the spermatazoa of the other man.

Second. Prenatal influences on women may result in weakness or malformation, but it is not believed that they have any real effect otherwise.

Theory of Heredity. This theory is quite complicated, and is hard to explain, but the following information is about as clear as is necessary for ordinary purposes:

There are something like one million spermatazoa with each sexual intercourse. Let us suppose that the grandfather and the grandmother possess absolutely original characteristics, disregarding all their ancestors; and also suppose that each spermatozoön or ovum has 16 germ cells. Then, as the fertilized ovum has only the same number of germ cells as each spermatozoön or ovum, the fertilized ovum will have 16 germ cells and their son will inherit germ cells in proportion 8A from father, 8B from mother. Similarly, his wife will inherit from her parents (also grandparents of child in question) germ cells in proportion 8C from her father, and 8D germ cells from her mother. Now, when these two are married, the male spermatozoön which produces the child under consideration is only one of a million spermatozoa, each composed of 16 germ cells taken at random from billions of germ cells in a receptacle containing half A and half B, but not at all mixed everywhere in the proportion 8A to 8B. The proportions of this particular spermatozoön are most likely to be 8A to 8B, but they may be 12A and 4B, or even 16A and 0B. Similarly, the particular ovum may be 8C and 8D, 14C and 2D, or even 0C and 16D. It is thus seen that the child in question may be 8A, 0B, 0C, 8D, or 6A,

2B, 7C, 1D, or practically any other combination, but will more probably be 4A, 4B, 4C, 4D, than any other. It is thus seen that the child will more probably resemble its father or mother, but there are chances that it may resemble greatly its grandparents, and going back still further there are very remote chances that it may resemble a distant ancestor. Statistics of many cases show that the average of inherited qualities is one-half from father and mother, one-fourth from grandparents, one-eighth from great grandparents, etc. It is evident that so-called blue blood descent is of no particular value above great grandparents, as the chances are exceedingly remote of inherited original qualities from these ancestors; e. g., a child of the present day will have had some 67,000,000 ancestors since the Norman conquest, and the chances of inheriting qualities of a particular ancestor at that time are $\frac{1}{1{,}000{,}000{,}000{,}000{,}000}$ If the physical characteristics had been transmitted equally, the child would possess $\frac{1}{76{,}000{,}000}$ of the blood of this ancestor, that is $\frac{1}{1{,}000}$ of a drop.

The inherited qualities may be divided into three cases:

(a) Blended, that is, half the sum of strengths of a characteristic or several characteristics of both parents.

(b) Exclusive, being practically characteristics of one ancestor.

(c) Particular, being certain characteristic of one and certain characteristics of another.

Some claim that a strong ancestor will transmit more of his own qualities than will a weaker one.

Inheritance of Acquired Characteristics. However much may have been the evolution in past years, it seems to have been practically completed centuries before the present day. Experiments show that it is practically impossible to change the physical characteristics; (e. g., if a thousand ancestors had lost one arm the descendants would still be born with two arms) consequently, it is only possible to inherit strength, constitution, etc.

Of course it is evident that in some past era acquired mental characteristics were also inherited; otherwise all germ cells and all people would be alike now. Yet, no one has been able to furnish

clear proof of inheritance of acquired mental characteristics in present times. It is true that developed mental qualities have shown in offspring, but careful investigation has always proven that the so-called developed quality was not altogether developed, but was latent in the parent and naturally transmitted to the offspring. Of course, environment and training assist in development of these characteristics in the child. Scientists, however, are not at all agreed on question of inheritance of acqquired characteristics.

Inheritance of Disease. Disease may be inherited in two ways.

1. From the body of the mother during pregnancy, called congenital inheritance.

2. From the spermatozoön or ovum in its original form. This is called inborn inheritance.

Congenital traits inherited are such as syphilis and alcoholic taste, same being transmitted through the blood of the mother.

Inborn traits inherited are such as baldness, idiocy, deafness, predisposition to tubercular weakness, insanity, etc. Of course, in some cases, due to the possibilities of inheriting qualities unequally from various ancestors, as shown above, some children may inherit the above qualities and others may not. Likewise, the germ cells of alcoholic parents are not necessarily alcoholic; but they are weakened as the result of alcohol, and the children are nervous, and often mentally or physically weak, and predisposed to nervous troubles, especially insanity.

It is also known that the children of near relatives are often more or less unusual, sometimes abnormal. This is caused by the fact that due to the possible inequality of transmission of germ cells as explained above, the children may inherit an unusual number of same germ cells (traits), which are present in both father and mother, resulting in unusual strength of qualities which are equally apt to be good or bad, physically or mentally.

Effect of Environment. Since it is generally accepted that the inherited qualities are practically fixed upon birth, it is evident that the action of environment is limited solely to the development of those qualities. This is easily proven; e. g., in the slums of the cities the worst qualities are developed and the best qualities are not developed. A nobleman among thieves would probably make a very poor thief because of his lack of development of

deceptive and unmanly qualities, although his superior intelligence might make him a superior among thieves in spite of his utter failure as a thief.

Improvement of the Race. The modern science of eugenics is becoming quite important. Eugenics means practical selection with a view to producing a better race of people. Statistics collected among thousands of children show that the average of intelligence and good or bad qualities of the children is the same as that of the parents. In no case has a child of superior attainments been born from inferior parents, or the reverse. It would thus seem that the world will not grow any worse or any better in the future than it has been growing in the past. But this is not now true. The inferior parents produce offspring in greater number than do superior parents, but, in the past these inferior offspring suffered greater mortality, and the average of grown people remained about the same. Of recent years, however, medical science has made such great progress that these inferior children do not die as before, and the number of inferior adults is consequently increasing very rapidly. It is proposed, by persons interested in eugenics, to arbitrarily apply laws which will eliminate the unfit by rendering them unable to produce offspring, i. e., by sterilization. This is a difficult proposition. Six states of the Union have passed such laws, but their success has not been evident. In the individual case, each family should inquire into the characteristics of other families as far back as three generations before allowing marriage with them, for the laws of heredity are fixed and immovable.

For more detailed information, see First Principles of Heredity, Herbert, price $1.75.

CHAPTER XI

BABIES

General Remarks. Until comparatively recently, the care of babies was dependent upon knowledge handed down in a more or less indefinite way from ancestors on the feminine side. Of recent years, however, specialists have taken up this subject with very gratifying results. There are two books which cover the subject fully, and no family with babies should be without at least one of them. These books are:

(a) The Care and Feeding of Children, Holt, price 75 cents.

(b) The Child, Sill, price $1.25.

In this chapter, there is given a certain amount of general information necessary on the subject. It is not intended, however, that this information should be regarded as complete, and one of these books is practically necessary to any family with babies.

In this chapter, only the first three years of a child's life are considered; after that, it is taken up under the subject of children.

PREPARATION

In preparation for the birth of a baby, the following clothing should be ready:

Four medium size silk and wool shirts.
One yard of soft, white flannel for bellybands.
Two pairs of hose.
Two outing-flannel skirts (for the night).
Four flannel skirts.
One wrapper.
Three slips.
Two dozen cotton diapers—one dozen 20x40 and one dozen 22x44.
Three plain slips for night dresses.
Two sacques.
Two flannel bath aprons to wrap the baby in after the bath.
One crib, with mattress, etc.

For general purposes there should be a baby basket containing the following necessary articles:

One pincushion.
Three packages safety-pins, assorted sizes.
Box talcum powder.
Cake castile soap.
Three wash-cloths.
Three soft bath towels.
Three baby towels.

Infant hair-brush and fine-tooth comb.
One jar of white vaseline.
Puff and puff-box.
Absorbent cotton (one package).
Bath thermometer.
Package of sterile gauze.
Two yards of linen.
A bottle of saturated solution of boracic acid.
One package of wooden toothpicks.
A pair of scissors.
Bottle of sweet oil.

GROWTH

The following gives the growth and progress of the average child. It is not by any means a proof of weakness or sickness that any particular baby does not follow this schedule:

Table of Weights.

Birth	7	½	pounds
One week	7		"
Two "	7	¾	"
Four "	8	½	"
Eight "	10	½	"
Twelve "	12		"
Twenty "	15		"
Thirty "	16		"
Forty "	18		"
One year	21		"
Two "	27		"
Three "	32		"

The above weights do not include clothing. If the baby loses weight steadily, there is something wrong, and the doctor should be called.

A baby should

Notice objects about the third month.
Hold up its head during the fourth month.
Laugh aloud about the fourth month.
Reach for toys about the sixth month.
Sit up about the eighth month.
Be weaned from breast by the twelfth month.
Stand alone about the twelfth month.
Begin to say "papa" and "mamma" at about one year, and
Put together sentences at about two years.
Be weaned from bottle about fourteenth month.

Walk alone about the fourteenth month; it should never be urged to walk, as this is apt to cause a baby to be bowlegged.

The fontanel should be closed about the eighteenth month.

The two central lower teeth appear about the seventh month; the four upper central teeth about the tenth month; at one year a baby generally has six teeth.

DUTIES OF NURSE

The nurse should preferably be a middle-aged woman. Young women are, as a rule, careless.

The nurse should be cautioned never to let anybody kiss the baby on the face or on the hands; in fact, there is no necessity for anybody, except relatives, kissing the baby at all.

Bathing. At birth the cord is tied, and should be let alone until it dries up and drops off, which is about the tenth day. No full tub bath should be given the baby before this time; but the baby should only be placed in a basin and rubbed with the hand or a soft wash cloth; then dried quickly with a soft bath towel. The water should be at a temperature of 100° Fahr.

The full tub bath is more complete in every way. The baby is placed in the water and held by the nurse. The genital organs are sponged with absorbent cotton or a solution of boracic acid, one teaspoonful to a glass. If puss is in the eye, it should be cleaned with a solution of boracic acid (10 grains to the ounce). If necessary the mouth is swabbed with a little absorbent cotton twisted on a toothpick. After bathing, the baby is rapidly dried with a soft towel, and the folds, armpits, etc., which rub together are dusted with talcum powder.

The full bath should not be given less than an hour after feeding. Very little soap is used. The temperature is about 99° Fahr.

Room. If possible, the baby should have a room of its own. As the baby spends nearly all of its early life in this room, it should be cheerful and properly kept. The temperature should be from 60° to 70° during the day, and about the same during the night; after one year it may be allowed to go lower, say, to 40° during the night.

The room should aired twice a day at least—in the morning and in the evening—and the baby should be removed while the room is being aired.

The baby should not sleep in bed with another person, but should have a bed of its own. This prevents accidents, often fatal.

Equipment and Toys. The nursery should be provided with a carriage, a baby's crib (one with a side which can be raised so that the baby cannot get out), an exercise pen, and later a baby walker. The baby should never be left in the baby walker so long that it becomes fatigued.

Toys with sharp points or with paint or loose parts that could be swallowed should never be given the baby.

Clothing. There is nothing especially important as regards clothing, except that the chest should be covered with soft flannel and the abdomen supported by a broad flannel band. This band supports the walls of the abdomen, and helps to prevent rupture; after four or five months it may be removed if it is evident that the baby's abdominal walls are strong. Babies do not require as heavy clothing as older people, because they live in a warm room; but nurses should be particularly careful to wrap them up warmly when taken out for an airing.

Napkins should be immediately removed when soiled or wet. Wetted napkins may be used again, provided they are not stiff. Napkins should never be starched in ironing.

Crying. Crying is not necessarily a sign that the baby is sick or needs something. Crying is necessary to exercise the baby's lungs. If the cry is continued, it is best to see that the baby is not in pain by being stuck with pins or something of that kind. If the cry is weak and whimpering, the baby is probably sick; if the cry is strong and healthy, the baby is probably trying to attract attention or only exercising its lungs.

Airing. To accustom the baby to an airing, it should be fully dressed and placed in a crib a few feet from the window, at first for only 15 minutes, and increase this about five minutes a day. In the summer the baby can be taken out in a carriage when about a week old; in the winter it should not be taken out until about three months old. When the baby is taken out in the carriage, see that it is fully covered and cannot get chilled; that the wind does not blow in its face and that the sun does not shine in its face.

TRAINING

The baby should not receive undue attention, and yet it must be remembered that a certain amount of attention is necessary. If the baby is absolutely unnoticed, the mind will not develop as rapidly. Of course, later, when the body is physically older, the mind will develop more rapidly; but it is best to show a certain amount of attention, without spoiling the baby. Naturally, too much attention leads to bad habits. It would be a safe rule to require that only the parents and relatives show attention to the baby, and that the nurse should not attempt any intellectual training. Especially should the nurse be directed not to attempt to make the baby "show off."

Sleeping. A young baby sleeps nearly all the time; it should, however, be waked up for feeding. A six months' old baby sleeps about two thirds of the time. It should also be waked up for feeding in the daytime; but it should have been trained at this age to go without night feeding (see table showing hours of feeding).

It is not at all necessary to rock the baby in order that it go to sleep. If this is done once, the baby will expect it. After such a habit has been developed it is necessary to break it by not doing it any more. At first the baby will cry a great deal, but in four or five nights there will be no such trouble. After about five months the child should not be fed between 10 p. m. and 6 a. m.; consequently, it should be trained to sleep all night long. When the baby is put in the room to sleep, the room should be darkened and the child made comfortable and left alone. Pacifiers, soothing syrup, etc., are not advised as their relief is only temporary, and acquired tastes will give much trouble later.

Toys. Habits of order and regularity can be taught the child by making it careful to put away the toys when through playing with them. Useful toys are just as satisfying to the child and are to a certain extent educational.

Bowels. The bowels should move about twice each day after the child is a month old. They can be trained by pressing a vessel against the child, supported horizontally. After this is done about a week, much trouble with napkins is avoided, as the bowels are very easily trained.

Bed Wetting: This is generally due to liquids taken late in the day. As the child should be given liquids at this time, until

two years of age, it is difficult to stop bed wetting before beginning of the third year. At that time, do not give liquids after 4 p. m., and take the child up each night at 10 p. m. If the training does not result satisfactorily after two or three weeks, it is possible that there may be some local irritation or general weakness which would require the services of a doctor.

FOOD

The following table shows schedule for feeding a baby during the first year. If the baby is bottle-fed, give the amounts as stated; if breast-fed, about twenty minutes will be sufficient to furnish the desired quantity. If amount is not sufficient, the baby cries when removed from the breast; also, it sucks its finger. The child's appetite is a good test as to the amount, provided the child is in good health and has not formed greedy habits. The times are not absolute as to exact hour, but the intervals are about correct; and it is especially desirable that the hours of feeding be the same each day, so that the baby will form regular habits.

Time	Hours of Feeding beginning a.m.	Quantity each feeding.
1st and 2d day	2, 8, 2, 8	about 1 oz.
3 days to 4 weeks	2, 6, 8, 10, 12, 2, 4, 6, 8, 10	" 1½ to 3 oz.
4 weeks to 2 months	2, 7, 9:30, 12, 2:30, 5, 7:30, 9	" 3 to 4½ oz.
2 months to 5 months	2, 7, 10, 1, 4, 7, 10	" 4½ to 6 oz.
5 to 12 months	7, 10, 1, 4, 7, 10	" 6 to 9 oz.

Note—An ounce of liquid is about 3 level teaspoons.

Mother's Milk is by far the most suitable food for the baby. It contains the proper amount of each of the food elements, and is by nature even changed at the proper times for the growing baby. Statistics show that three times as many bottle-fed babies die as breast-fed.

However, the mother should not feed the baby when she has tuberculosis or some other communicable disease, or is in bad health and cannot furnish the necessary amount of milk. Also, sometimes the mother's milk does not agree with the baby, in which case she could not furnish milk for it. In these cases, a wet-nurse should be provided, or the baby should be fed from the bottle.

The mother's milk does not come in abundance until the third or fourth days; but the baby need not be given more than the mother can furnish, as the baby by nature does not then require

more. The diet of the mother should consist of light food, with plenty of liquids, such as oatmeal, eggs, soups, plenty of milk and cocoa; she should avoid wine and beer. Sour fruits are bad. The health of the mother should be maintained by care at all times; and her nervous condition is even sooner reflected in the baby than is the effectiveness of her diet. The return of mnstruation is often the sign that it is time to wean the baby; for generally the amount of milk is decreased, and likewise the quality. However, as long as the baby is healthy looking, its tissues firm and strong, the milk plentiful, and the appetite is good, the mother's milk can be continued.

Artificial Milk can never properly take the place of mother's milk. Cow's milk is the nearest to mother's milk, but this is not satisfactory, because it does not contain the exact elements of food values that are contained in mother's milk. Likewise, mother's milk is always fresh and unspoiled, while cow's milk is very often impure, not fresh, and not of the right temperature.

If, however, the baby must be bottle-fed, certain changes and additions can be made to cow's milk, certain precautions taken, which will render it very much like mother's milk. If these precautions are not taken, and the milk is not altered as explained, the milk will not be at all suitable for the baby. With all possible precautions, however, as stated before, three times as many babies die when bottle-fed as when breast-fed. In large cities, there are milk laboratories which prepare cow's milk in the proper proportions. If it can be obtained fresh, such milk is better prepared and more suitable than can be made by the wife with her limited facilities at home, as described below.

The composition of artificial milk is as follows:

	Age of baby				
Proportions	2 days	4 days	8 days	4 weeks	8 mos.
Top milk	2 tbsp.	3 tbsp.	4 tbsp.	6 tbsp.	10 tbsp.
Milk sugar	1	1	1	1	1
Lime-water	1	1	1	1	1
Boiled water	17	16	15	13	9

Note.—It is seen that as the amount of milk is increased, the amount of water is decreased by the same amount. The increase of milk is made slowly, and the effect on the baby is watched very carefully.

The milk sugar is dissolved in the boiled water; it should be filtered if not clear, or if there is a deposit.

The lime water is strained and measured from a saturated solution.

Top milk is simply milk taken from the top of unskimmed milk which has been standing five hours, the thicker milk thereby rising to the top. Methods are available whereby all of the milk is used, not the top only, but this is more variable in quality than the top milk obtained as described below:

First: The milk should be strained as soon as received, and placed in bottles. The bottles should be rapidly cooled by being placed in ice water or cold spring water for half an hour (placing in a refrigerator does not cool rapidly enough), and then placing in a refrigerator or cool place. If the milk is of doubtful character, and no better can be obtained, it should be pasteurized; that is, heated to 155° Fahr. for thirty minutes to kill the germs. Pasteurized milk will keep for 24 hours, and is not harmed by pasteurization. If necessary to take milk on a journey, it should be sterilized; that is, heated to 212° Fahr. for an hour and a half. If kept upon ice, sterilized milk will keep for ten days; but fresh milk is preferred, as sterilized milk is more or less difficult to digest, often causing constipation.

Second: After the milk in the bottle has set for five hours, the top milk is obtained by taking off the top third of poor milk, the top half of ordinary milk, and the top two-thirds of especially rich milk, as Jersey, etc. Jersey milk is not more suitable than other milk, as the top third of ordinary milk is just as good as the top two-thirds of Jersey milk, and the above table cannot be used for the top third of Jersey milk, as it would give too rich artificial milk. Take milk off with a spoon; do not pour it out, as this does not give the top milk. Place the top milk in a separate bottle and close it tightly.

The artificial milk is prepared by simply mixing the proportions as shown above, varying with the age of the child. The proportions are generally mixed in a pitcher, and all stirred together.

The milk sugar is dissolved in the boiled water and strained if necessary.

The lime water is added.

The top milk is taken from the top milk bottle. Be sure to first shake the bottle, as otherwise the top of the top milk will be obtained, and the proportions as named above are not for the top of the top milk, but for all of top milk.

Preferably, to save trouble, all of the artificial milk for one day is made at one time and the proper amounts for each feeding are often made up for the whole day and placed in separate bottles.

The artificial milk should be placed in a refrigerator where its temperature will be below 50° Fahr. Just before feeding, the artificial milk, in its bottle, is placed in warm water and heated to 105° Fahr.

If the child is taken on a railroad trip, it is necessary to take along a little basket of milk kept cool. There are little ice boxes for this purpose made for traveling, which can be bought in almost any city.

Second Year. The baby must gradually be taught to take solid food. The artificial milk will gradually give way to the cow's milk. The diets given below are gradually merged one into the other.

Diet at twelve months:

6:30 a. m. Breakfast of warmed milk, 20 tablespoons; add a little oatmeal.
9 a. m. Orange juice, 4 tablespoons.
10 a. m. Second breakfast of warmed milk and outmeal, about 25 tablespoons, twice as much milk as oatmeal.
2 p. m. Broth, about 15 tablespoons.
6 p. m. Same as 2d breakfast.
10 p. m. Same as breakfast.

Diet at sixteen months:

Practically same as above, except that a little more of each is given. There is added toast or biscuit at 10 a. m., 2 p. m. and 6 p. m.

Diet at two years:

6:30 a. m. Breakfast of warmed milk, a little more than a cup.
9 a. m. Fruit juice, 7 tablespoons.
10 a. m. Second breakfast of cereals, with milk and toast or biscuit; a cup of warmed milk.
2 p. m. Six tablespoons of broth, a soft boiled egg (or finely chopped meat); toast or biscuit.
6 p. m. Cereal, or bread, and milk.
10 p. m. Milk, if not yet trained to do without it.

Third year: At this time, solid food may be given more or less freely. Night feeding should be stopped. Practically there are three regular meals, with milk between these meals, but not too much.

Diet for third year:

7:30 a. m. Breakfast of cereal, warm milk, one egg, bread and butter.

2 p. m. Dinner of soup, meat well chopped, potatoes, peas, or asparagus tip, baked apple or prunes.

6 p. m. Supper of cereal, or bread, with milk.

Weaning. At the age of about ten months, the bottle should be substituted once a day. Start with weakest artificial milk, gradually changing to strongest, then to cow's milk. As the baby becomes used to the bottle it is given the bottle more often until at about one year of age the child is trained to use the bottle altogether. Often this is done much earlier, especially when the mother's milk gives out. If the baby has secured a good start by mother's milk for the first four months, there is not so much danger from bottle feeding after that time, though, of course, it is not best.

At the age of about fourteen months, the baby should be weaned from the bottle, except for the night feeding, but it should be fed at night from the bottle for practically all of the second year.

To teach it to drink from a cup, keep the bottle from it. It will probably object at first, sometimes for over a day, but do not be alarmed, just wait until it is hungry enough and it will then drink from a cup. After this is taught, gradually add cereals and other solid food.

SICKNESS

As a general rule, a doctor should be called for sick babies. After three or four years, a child is able to explain its sickness and there is less trouble in deciding what is best.

Colic: Symptoms; strong and intermittent cry, drawing up of feet, other signs of pain. Treatment; warm the feet by hot water bag or fire; warm the stomach by hot water bag or hot flannel. If colic continues, inject into the bowels ½ glass of warm water containing 10 drops of turpentine.

Constipation: Give the baby an injection of one tablespoon of sweet oil, or of tepid soap and water. It is far better to have trained the baby's bowels in regularity of movement so that there will be no constipation.

Contagious Diseases: There is no possible advantage in exposing a baby to contagious diseases, such as measles and chicken pox, so that it may have them and get it over with. Measles are

particularly dangerous to children under four years of age. Scarlet fever is probably the most dangerous; whooping cough is very bad.

Convulsions: Bathe the baby's feet in a mustard bath made by putting a handful of mustard in the baby's tub of tepid water. When the skin shows red or tingles, roll body in large towels dipped in the mustard bath, put ice pack on head, and put in bed. Convulsions are not uncommon and are not generally dangerous, being usually caused by something wrong with the digestion. However, convulsions generally precede serious diseases, such as scarlet fever; so send for a doctor, if convulsions are frequent and continued.

Croup: See Chapter on Medicines.

Diarrhoea: Generally, the stopping of milk and all other food for six or twelve hours will be sufficient; but if there is an irritating substance in the bowels, a teaspoon of castor oil is sometimes necessary in order to get rid of irritating substances in the bowels. Diarrhoea is the most frequent cause of the deaths of babies.

Fever: The normal temperature of a baby is about 99, but it may be as high as 100 and 102 and still be only a very mild illness, as, due to nervousness, a baby's temperature is subject to more sudden changes than that of older persons. However, if a temperature of 100 is maintained for more than one day, or if a temperature of 102 is maintained for six hours it is safe to conclude that the baby is really sick, and send for a doctor. To take the temperature of very young babies, place the thermometer in the rectum or groin.

Swallowing Toys: Do not give the baby a cathartic or anything of the kind. Give it plenty of bread, potatoes, etc. The article should leave the body in about a week.

Vaccination: The baby should be vaccinated at about six months, preferably on the leg.

Vomiting: After feeding, the baby often vomits some of the food. This is not serious, being only a sign that too much was taken. If, however, there is acute indigestion and repeated vomiting, fever, etc., all milk should be stopped at once and only boiled or barley water given every three hours for say twelve hours. Milk should not be given again until at least a day after vomiting has ceased.

CHAPTER XII.

CHILDREN.

General Remarks. Few young wives realize the joys attendant upon the care and training of children of their own. Other parents rarely talk of the real pleasures of possessing children and watching their development, their ready grasp of ideas, their unfailing trust and confidence in their parent as their final arbiter and judge, even God to them. It is remarkable that so many wives complain of the cares of raising children, and so few realize the ever present joy of possession, the glowing warmth to the heart of enduring affection. If any childless couple has serious doubts that they are missing the one greatest happiness of life, let them only endeavor to secure final possession of one of the nine children of their poor coal man struggling for food. Both he and his wife will refuse to consider the proposition. This is not due to any theoretical mother love, but is due solely to the pleasures of possession, to the joy of raising and teaching, to the unknown hopes of the future. There is, indeed, the mother love; and sometimes it may overbalance the selfishness of the couple; if it does, they see that it is best for the child and give him up. Many couples have said that they want no more children, but none will say or think that those living have been a liability instead of an asset.

Since children are to be raised, the parents must study the question seriously. Of course if it does not die, the child will some day be grown; but the development of body and mind of this grown person is dependent upon its inherited qualities and its training, both of which come from the parents. The duties of father and mother are important; they cannot be delegated to ministers and teachers. The home is the place of training; the church and school are places of learning. Father and mother must know children, their methods of thought and periods of growth. The mother particularly is charged with their early training. By careful study, she can become a good teacher and mother; by entering into her duties with zeal and love she can derive more real pleasure than can be given by all dances, receptions and card parties.

PHYSICAL GROWTH AND CARE.

Weight and Height. The following table shows the average weights of boys and girls to the twelfth year. These weights include ordinary clothes:

Year	Weight	Height
4	37 lbs.	38 in.
5	41	41
6	45	45
7	49	46
8	54	48
9	60	50
10	66	52
11	72	54
12	77	55

At about the twelfth year the two sexes begin to develop along different lines. Before that time they are generally alike and could really be assigned similar games if customs did not render it undesirable.

Eyes. Examination shows that 70 per cent of the children in New York City schools have defective eyes. The eyes should be examined early and about once a year to see that they are not defective. Examinations should be made by at least three different reputable doctors, as nearly everyone prescribes glasses for minor ailments. As glasses are very inconvenient, and once worn are rarely dispensed with, they should be avoided if possible. If the child has constant headaches, it is probably necessary to wear glasses for part of the day at least.

Ears. Over 30 per cent of the New York City school children have defective hearing. Often a so-called stupid child is really bright, but slightly deaf. Prompt treatment may prevent deafness; colds and adenoids are great courses of deafness.

Teeth. The grown person has 32 teeth. The child has cut 20 teeth at about three years; these have no roots and are called the milk or temporary teeth. This means that 10 teeth in each jaw, 5 on each side of the center, are to be shed, and replaced by permanent ones with roots. These milk teeth begin to shed at about seven years of age. At this time particular care should be taken that the new teeth, the permanent ones, are not allowed to grow improperly. This is possible for several reasons, as follows:

(a) The milk tooth may be firm and the permanent tooth may force its way to the side.

(b) The permanent tooth may be thoughtlessly pressed out of its proper position.

(c) The jaw may be too small, and permanent teeth may be crowded out of position.

As loss of teeth or misshaped teeth prevent proper growth of the jaw and injure the appearance of the face as well as the teeth, children should be taken to a dentist who makes a specialty of straightening teeth. This should be done while the permanent teeth are coming, or after they have come, in improper position. At the age of twelve the jaw and teeth can be straightened by plates in about three weeks; after maturity it takes several months, and is often impossible. If a permanent tooth does not come at all, a dentist should use the X-ray to locate it (for it is surely in the jaw), and should bring it out; otherwise, it may form an abscess and will at least cause some trouble.

The following table shows time of appearance of teeth:

Age.	Nos.	Description.	Total No.
1	1 and 2 milk	Called central and lateral incisors	8 milk
2	3 and 4 milk	Called anterior milk molars and canines	16 milk
3	5 milk	Called second milk molars	20 milk
7	6 permanent	Called first permanent molars	20 milk, 4 permanent
8	1 and 2 permanent	Called incisors, displacing milk teeth	12 milk, 12 permanent
9	4 permanent	Called bicuspids, displacing milk teeth	8 milk, 16 permanent
10	5 permanent	Do	4 milk, 20 permanent
12	3 permanent	Called canines, displacing milk teeth	24 permanent
13	7 permanent	Called second permanent molars	28 permanent
21	8 permanent	Called wisdom, completing permanent set	32 permanent

For best care the teeth should be brushed after each meal; but once each morning is all that can be expected of a child.

Adenoids. Over 55 per cent of the New York City school children have adenoids. This is a foreign growth in the throat, and

causes deafness, colds, weak eyes, etc. Mouth breathing is evidence of an extremely bad case. Adenoids should be cut out; the operation is safe, cheap, painless, and simple.

Catarrh. Catarrh should be treated early by a reputable specialist; otherwise it will become chronic and incurable. It is not dangerous to people with strong lungs.

Feet. The feet should not be fitted with a tight shoe. Such pressure does not prevent growth of foot, except that it may narrow and deform them by pressing one toe under another. The Chinese small foot is not really a small foot, but is a stump with the toes pressed out of existence. Shoes should preferably be too wide, but need not be too long.

Toe nails grow in width at the front; so keep them cut short, but not in the quick.

Ingrowing toe nails are generally caused by shoes with too little vertical space for the toes. Another shoe must be worn; and the toe nail scraped fairly thin and kept so until the toe nail is no longer ingrowing. It does not help to cut it out, as it will come back just as it was.

Bare feet and legs are good for children during the summer seasoon. Bare soles to the feet are not so healthy as sandals. If the child has not a strong arch, bare feet or flat sandals will make him flatfooted, which results in pain and fatigue when standing or walking. To support the arches, put steel supporters in shoes and sandals; they cost about $1.75 per pair. In southern states, barefoot children catch "ground itch," which means the hookworm and should be quickly treated.

Food. The child should gradually progress from the diet of a baby to that of a grown person: At first, much milk and other liquids; meats such as are easily digested (see chapter on Food); vegetables and fruits (except bananas); simple desserts, such as puddings and raisins, or a little ice cream. Chronic indigestion is generally due to gratification of a developed taste for pies, cakes, candies, etc. The child should eat only at regular hours, and should chew the food. If the child wants only sweet things, it is best to give him no food until he is hungry enough to eat wholesome food.

To prevent constipation, the bowels should be trained to act regularly each morning on arising; and in young children, also each night before going to bed.

Exercise. The average child will take enough exercise, and often too much if not restrained. Gymnastics in the house are of less value than almost any outdoor game at school or the playground. It is only necessary to see that the child does not become stoop-shouldered at school. To develop an erect figure, a child should practice throwing chin forward and back into neck at least 50 times a day. This will make head erect, throw chest foward and insure normal breathing. For sleeping, no pillow or a very small pillow should be used.

Tasks. Long tasks are not very harmful, because the child will stop to rest. But no tasks should be given which are too great for its strength, as the spirit of emulation is great in children and rupture from lifting too heavy weights is not at all uncommon.

MENTAL GROWTH AND CARE.

Strange as it may seem, a knowledge of history is of great assistance in determining the mental development of a child, for it is an undoubted fact that the educated mind of a grown person today has passed through all the stages of development of the human race.

The following table shows the approximate ages of each development:

Age	Historical Prototype.
0—3	Prehistoric.
4—6	Patriarchal guidance.
7—10	Savage families.
11—13	Savage tribes.
14—15	Chivalry and feudal system.
16—17	Revolution and independence.
18—21	Republican organization.

Parents are often surprised at the quick changes of their children. Stories which two months ago were interesting and exciting are now tiresome. By considering the characteristics of the people of the historical eras named above, remembering, of course, that there were both backward and also unusually intelligent people in those days, it is possible to estimate fairly closely the mental development of a child at any age. Treat the child as you would now with your superior knowledge, treat the grown people of the era corresponding to the child's age. Note the similar mental development as follows:

0—3 (Prehistoric): The child is developing by instinct; in coordinating its muscles and brain; its mind is growing (in fact, grows more these first three years than in all the rest of its life); is pleased with toys that make a fuss; is generally afraid of the dark.

4—6 (Patriarchal Guidance): The child thinks of itself alone; considers no one else; brings its troubles to its parents with the sublime faith of the savages in the patriarchs; has the religious instinct, but sees no real difference between its parents and God; is pleased with stories of fairies, goblins, and supernatural beings, and invests Biblical characters with supernatural characteristics.

7—10 (Savage Families): The child sees the advantages of kinship; develops loyalty to his parents; still retains somewhat his mixed idea of parents and God; prefers stories of adventure with individual heroes working for family or community.

11—13 (Savage Tribes): The boys join in gangs and the girls in sets; religion becomes a habit, with God absent and parents present, both to be obeyed because it is right; reads stories of heroes at the head of organized bands, such as Robin Hood and Jesse James. From 4—13 years, corresponding to the eras before written records were devised, the memorizing power of the child is wonderful, just as its historical prototype possessed a wonderful memory.

14—15 (Chivalry and Feudal System): This is the age of sex development, the girl henceforth developing a year or two earlier than the boy at ages stated in the table; the child develops unusual chivalry; love, mental and physical, are constantly present; imagination runs riot, often with disastrous results; longs to be a knight (boy) or a knight's lady-love (girl) as in the days of Ivanhoe; becomes sentimentally religious, desiring to be a hermit, and sometimes seeks self-immolation. This period is fraught with dangers to child, and parents must be careful to give advice, but not drive away their children from their confidence.

16—17 (Revolution and Independence): The child becomes self-assertive, wishes to control himself, his religion and actions; wishes to be by himself, to work out his own destiny, as did the Pilgrim Fathers and the Pioneers of American history; often leaves home or college and strikes out for himself.

18—21 (Republican Organization): Sees his duties in the world; realizes the advantages of co-operation; reasons logically as to religious matters.

Many children never develop to the final period of Republican Organization, girls of the wealthier families being especially disposed by false training to stop at the Feudal period. The Russian peasants of today are about half way between the eras of savage tribes and the Feudal system. Some children are even forced mentally to skip certain periods, but this does not result in increased intelligence; it is unnatural and generally harmful.

TRAINING.

The suggestions below are for assistance to the wife. They cannot always be followed. For example, it is very easy to say that the wife should not let herself be worried by the children and should set aside certain hours during which they are under no circumstances to come to her; but in practice it is impossible for her to keep herself locked in her room with the child loudly crying outside for an unknown cause, which may be a finger chopped off, but is more probably a torn dress of a doll. However, by consideration of these suggestions, much unnecessary trouble will be avoided and a great deal of unexpected pleasure will be enjoyed.

Control: In any plan for control of a child, as well as in any other consideration of the child's mental growth, we must consider the child's historical prototype. Punishment need not be explained to a child 0—6 years of age, but explanation of reasons for punishment are absolutely necessary for a child 16 years old. As a general rule, physical punishment never makes the child better; it only creates a sense of wrong in the child's mind, and in later years the grown person remembers the wrong, reasons over it, and concludes that the punishment was administered because of anger and lack of control of the parent. In fact, nearly every such punishment is administered to relieve the parent's anger rather than to improve the child.

Obedience is secured by decision and politeness. Study each child separately, and make demands for obedience accordingly. Do not exact too much, do not make unnecessary demands, and do not make an obedient child into a handy servant.

Home: The home is the only place for all training of children. Three qualities are to be trained; the intellect, will, and character. All of these are best trained in the home, assisted by the intellectual training of the school and the character training of the church.

The continual use of the word "don't" should be avoided; let the child alone, let it make mistakes and learn thereby, unless these mistakes will result in permanent injury. For example, a child may go without supper if absent at supper time, but it should not be allowed to hang out of a window so that it may learn by falling, or to play with sharp knives in order to learn by being cut.

The mother should teach the child to be alone, to amuse itself at least during certain hours of the day. The beginning of school is hailed with relief by most mothers. Recently, there has arisen a system of hiring a community nurse or governess to take care of the children of several families during certain hours. A good governess costs about $60 a month, which may be divided among several families. The idea is excellent; the mothers are greatly relieved, and the children are benefitted, as the governess is generally more capable than the mothers in the care of the children.

Just now, many theorists are worrying themselves over the question of how the child shall learn the truth about the story of the stork. This worry seems unnecessary; the child will learn, and will not be shocked, nor will its morals be injured. The mother need not worry particularly about the child's moral welfare until it reaches the age of sexual development and change. At this time, necessary information must be given to the child. At no time, however, should evil associates be allowed, because they retard or misdirect the training of the child in character development.

Amusements: In story telling, the always interesting book is the Bible. Others become tiresome. Theaters should not be too often attended, as the child will become satiated too early in life, and will not take a healthy interest later. Moving pictures should be special ones selected for the purpose.

Games will come naturally; boys and girls should be taught how to swim. The sand pile is very useful for amusement of young children. Camping is the greatest single amusement. It is not expensive and is good for both sexes, but especially for boys.

Families often club together and hire a cook and a teacher for all the children, and even the poorest families can spend a short time in the country in camp, or doing temporary work on a farm. City life is not the best for young children. This is evident by statistics which prove that 98 per cent of the young delinquents are city-raised.

The parents should never lose the sense of confidence and comradeship of their children. To retain this, they must play the children's games with them. This is often difficult at first, but proficiency can be acquired, with results pleasant and gratifying.

Schools are to supplement the home training, and can never do more than a small portion of the work toward development of the child's mind. Of recent years, the schools are branching out beyond their natural field of training the intellect, and are trying to train the will and character. This is due to the facts that (1st) teachers are generally more capable than mothers, and (2nd) mothers are not attempting to train their children; they are leaving this to the teachers. The schools are doing as well as possible, but a teacher is regarded as an outsider and the child never has the religious confidence in her as in its mother. Teachers who become mothers are generally the most efficient mothers.

The community governess is the first outside teacher; she is at first altogether a teacher, later a governess. The Montessori system of child training is next, in which the child teaches itself to a certain extent. Next are the kindergarten, the grammar school, and the high schools. In Germany, the boys of about 12 are bunched in clubs which travel the country under the guidance of a teacher who points out to them historical and natural points of interest.

The present trend of our public school system is toward the development of individuality by easy tasks, such as lectures, outdoor recitations, no examinations, etc., with avoidance of any disagreeable tasks. It is claimed and justly so, that association with others is the primary education in public schools, that actual useful knowledge acquired is very little under any system. It is also claimed that disagreeable tasks lessen control of the pupil; but the opponents of this system claim that the will-power can only be developed by actually accomplishing tasks more or less disagreeable, that adult life is a series of such tasks and that the child can-

not select his life duties as he can select easy courses at a university. At any rate, the present public school system is based on making education attractive and easy, and the will-power must be developed at home by the parents. The great development of individuality in the public schools will often result in selfishness, so we see that the qualities of love and unselfishness must be developed at home by the parents.

Church is like a school in that it develops the intellect, but it differs from the school in that it has practically no theories, and occupies itself also indeveloping character. Even so, the parents are again the best teachers, and the church teaching, however wonderful, can never be complete without the home training.

Child Labor in modern industries is a great source of injury to children; it retards and often entirely stops their mental development, while at the same time weakening and often ruining their physical health. There are families which need their children's pay to prevent them from starving, but states are now enacting laws to provide loans or even gifts to families in distress in order to make such child labor unnecessary.

A certain amount of labor around the home is an advantage to a child in that it develops all three qualities of intellect, will and of character, especially that of will-power, because the child learns that play must be supplemented by work.

CHAPTER XIII.

SONS.

General Remarks: The information in this chapter is intended to cover the life of a boy from the ages of 12 to 21. Except for formation of character, before the age of 12, this is the most important period of his life. At the age of 12 or over he begins to develop along lines different from his sister, he is exposed to all the temptations of youth, and because of ignorance or evil companions, he may form habits of thought or deed which will be a continual drawback in his future career.

The discussion below is intended primarily for a wife or mother, as a guide to her conduct toward her sons. Many of the facts mentioned are well known to the father, but some of them are not known, and it will be well for him to become familiar with this information. Also it would be advisable to make the boy himself read this chapter.

The subject is considered in three parts, Physical Welfare, Intellectual Welfare, Moral Welfare.

PHYSICAL WELFARE.

Between the ages of 12 and 17, the boy begins to grow rapidly. His frame lengthens very quickly, and he becomes lean, lank, and awkward. His appetite is enormous. He is sensitive, and shuns the company of girls.

The average mother seems to be utterly unable to understand a boy during this growing period. She dislikes to have him awkward and bashful, and she worries him greatly with her endeavors to correct these faults. This is not advisable. She should see that he has plenty of food, plenty of sleep, and that he takes a reasonable amount of exercise. Too much food or sleep cannot possibly injure him, but too much exercise may unnecessarily fatigue him. Do not believe that he will always be lazy, for he is always tired during this period of growth. His muscles have not grown proportionally strong as his height has increased, and they must be allowed to catch up.

On the other hand, if the boy does not exercise these muscles during growth, they will not properly develop, and the boy will remain weak after his bones have acquired their growth. A simple

and safe rule would be to simply let him or make him associate with boys during the day, thereby exercising enough. Do not let him study too much in the day. At night let him do all his studying more or less completely, and be sure that he goes to bed at about 10 o'clock.

If there is a gymnasium at the school, be sure that he takes the physical course. If there is no such course, something similar should be devised for him.

At the age of 17, he has practically acquired his growth of bones, and then he should increase the amount of exercise in order to broaden out and attain his possible muscular strength. If the boy ever goes to college, he generally is there at the age of about 17. This is the time when his heart and lungs are not quite developed, and his muscles have not yet acquired full strength. At this time above all others it is a fearful mistake to allow him to indulge in violent athletics, such as rowing, running, football and basketball. No parent, through mistaken pride, or a mistaken college loyalty of the boy, should let him indulge in any of these sports. College athletes, who have reached the age of 40, are almost unanimous in agreeing that violent athletics are of no benefit in building up the physique. Baseball, skating, gymnastics, and other mild forms of exercise are necessary and advisable. Walking is particularly beneficial.

As a result of participating in violent athletic games, the heart is distended and strained, the muscles are overdeveloped, the lungs are strained, and quite often more evident permanent injuries are sustained, such as torn ligaments, water on the knee, charley-horse, twisted arms, etc. The same exercise ten years later would not cause athletic heart, strained lungs, strained muscles, etc. It is not cowardly to refuse to join in such games. It is generally a foolish patriotism on the boy's part, and a kind of weak pride on the parent's part which permits the boy to participate. Many parents claim that their refusal will not prevent his participation, but this is not correct. If the boy be disobedient, which is rarely the case, a letter to the faculty of the college will be sufficient to prevent such participation on his part.

If circumstances are such that the parent cannot exercise complete supervision over the boy from ages of 12 to 17, it would be advisable to send him to a military school. There are many

such institutions in this country, where the work is easy, the drill is not hard, and the boy must follow normal habits. A military man is usually amused at these so-called military schools, but their very inefficiency and lax methods make them exactly suitable for a growing youth who should not study, drill, or play too hard.

Food: The food for a growing boy should be such as will build up muscles and bones; consequently the proportion of proteids should be greater than in the food of grown people. By looking at the table of food constituents (see Chapter on Food), it is seen that the greatest quantity of proteids is contained in an average helping of roast chicken, mutton chop, roast beef, lamb chop, baked beans, oatmeal etc., while the least is contained in sugar, syrup, butter, crackers, apples, cream, string beans, oranges, cake, white bread, etc.

Alcohol is bad physically. It has no real value even in small quantities, and in large quantities it weakens the growing cells, disintegrates tissue, and causes early fatigue. Unless immoderately used, its bad effects are not at once evident.

INTELLECTUAL WELFARE.

While the intellect of a growing boy is not actually weakened by quick growth, his bodily laziness or weakness reacts somewhat on the brain. He should not be forced to study too hard.

At about the age of 12, the boy's mind ceases to resemble the girl's, and his intellect demands reasons for the statements in his studies or elsewhere. His memory becomes less strong, and his reasoning powers stronger and more accurate. He should study mathematics, logic, physics, etc. He should not spend further time on music, singing, etc., unless he has shown remarkable talents in that direction.

In his school he should take a manual training course. It is good exercise, and will be useful to him in later years, no matter what his profession.

About this time, he should surely begin to acquire a fair knowledge of his own small finances. If possible, he should be given an allowance of his own, and he should be made to keep an exact account of his expenditures. It is best to give him full independence in his expenditures, thereby teaching him self-reliance; but he should be made to show his accounts each month with the full

knowledge that the expenditures will not be criticised, but that the method of keeping his accounts must be approved.

School Course: There is no reason why he should not take the full high school course; also a certain amount of business school course should be given him in some way. A knowledge of bookkeeping and typewriting will help him materially, whether he is to be superintendent of a steel mill or clerk in a shoe store. Private schools are not preferable to public schools; they may actually advance him more rapidly in books, but the loss by lack of association with boys of all classes more than counterbalances this advantage.

College: If possible, the boy should be sent to college at the age of about 15. If he has not finished high school, he should drop it. A college education is necessary for proper advancement in life work. In large business establishments, it is the rule to assume that a college graduate who has shown ability is suitable for promotion to higher duties. If the young man with ability has not had a college education, he can only attain promotion to higher duties by proving in some manner his capability for such duties, which capability is assumed for the college graduate.

Quite often the parent states that the son prefers not to go to college. Although true in rare instances, such a remark is generally understood by others as an attempt to hide the fact that the parent cannot afford to send the son to college. The advantages of college are so evident that no parent can well neglect to send a son, if possible, and the pleasures of college life are so well known that no intelligent son will refuse to seize any opportunity to go. Even where financially unable to go, an unusually intelligent boy can acquire a scholarship or work his way through college, or combine the two. His high school teacher can give him complete information as to scholarships.

A small college is generally preferable to a large one, and it is an advantage to start in the freshman class. If the boy will surely go later to a large university such as Yale or Princeton, he should preferably attend a preparatory school for these universities. If he intends to later enter one of the most important technical schools, he should leave his small college as soon as he can enter the freshman class at the technical school. In other words, he should select his final college, and should so arrange that he enter the freshman class and take the full four years course.

At a college, there are many things to be learned besides books. That is why a smaller college should be selected for preparatory course. A better comradeship prevails at small colleges or at military schools than at the larger colleges. A certain amount of self-confidence is developed.

In the smaller colleges or minor universities, the first two years are devoted to general education, and the last two to special courses. At the end of two years, the boy should know just what course he will probably follow through life, and should shape his studies accordingly. If he prefers, or his finances require it, he may finish his college life at his small college; but the larger universities are preferable, because they have better laboratories and are in every way better equipped for training in any specialty. The larger universities have a curriculum about two years ahead of the colleges, but few colleges follow exactly such a course of study that its graduates can enter the junior class at a larger university.

As to selection of life work, there is very little to be said. Formerly, there were numberless graduates of law, medicine, etc., while those of engineering, electricity, etc. were rare. Now, there are more college graduates of all kinds than there are situations. It is often claimed that the years spent at college could often have been better employed in acquiring experience; but this is misleading, for statistics show that a college graduate will in two years show greater ability than an equally gifted boy with six years outside experience.

Food: In the chapter on food, it is stated that there is no special brain food. However it is advantageous to eat only such foods as are quickly digested (see Digestion Table in Chapter on Food), as these require the blood from the brain for a shorter time in the stomach to aid in digestion. Such foods are rice, sugar, fruits, vegetables, bread, chicken, fish, etc.

Whiskey is bad, of course. It weakens the brain cells and causes them to be slow in performing their functions. It is certain that immoderate use of whiskey is injurious, and it is claimed by many reputable physicians that the so-called temporary stimulation of the mental faculties is really an excitement and lack of control resulting in seeming brilliancy, but really is not greater brilliancy but less control. Recent tests in school of boys without

whiskey or temporarily stimulated with whiskey show greater reasoning power, more accuracy, quicker thought, and better memory when not stimulated.

Cost of College Course: The following table gives information as to the annual cost of a course at various colleges of the United States. The expenses as listed are not the lowest possible, nor do they make any allowance for various possibilities of income by extra work; but they are the lowest for reasonable comfort, and the average expenses are generally higher.

COLLEGE STATISTICS

Name.	Location.	Yearly Expenses.	No. of Students.	Male or Female.	Assets.
Alabama:					
Southern Un.	Greensboro	$215	125	Both	$ 250,000
Un. of Alabama	Tuscaloosa	250	1,350	Both	2,500,000
Alabama Con. Fem.	Tuskegee		146	Female	357,000
Alabama Poly. Inst.	Auburn	200	800	Both	800,000
Arizona:					
Un. of Arizona	Tucson	250	250	Both	450,000
Arkansas:					
Arkansas College	Batesville		125		100,000
Hendrix	Conway	215	255	Male	350,000
Un. of Arkansas	Fayetteville	200	700	Both	1,000,000
Central Baptist	Conway		185	Female	70,000
California:					
Leland Stanford Jr. Un.	Palo Alto	400	1,737	Both	25,000,000
Un. of California	Berkeley		4,902	Both	15,444,000
Un. of So. California	Los Angeles		2,505	Both	875,000
Notre Dame	San Jose		118	Female	240,000
Colorado:					
Colorado	Colorado Sprgs.	465	757	Both	2,056,000
Un. of Colorado	Boulder	300	1,250	Both	1,500,000
Connecticut:					
Yale	New Haven	400	3,263	Male	14,665,000
Wesleyan	Middletown	290	420	Both	3,148,000
Delaware:					
State C. for Col. S.	Dover		120	Both	40,000
Dist. of Columbia:					
Georgetown Un.	Washington	250	1,533	Male	1,250,000
Florida:					
John B. Stetson Un.	De Land	250	500	Both	1,500,000
Un. of Florida	Gainesville		350	Male	750,000
Florida Female	Tallahassee		413	Female	300,000
Georgia:					
Un. of Georgia	Athens	180	611	Male	.....
Agnes Scott	Decatur		269	Female	650,000
Shorter	Rome	325	287	Female	425,000
Georgia Sch. of Tech.	Atlanta	275	939	Male	800,000
Idaho:					
Un. of Idaho	Moscow	400	763	Both	1,549,000
Illinois:					
Lake Forest	Lake Forest	275	211	Both	1,300,000
Northwestern Un.	Evanston	450	4,490	Both	10,000,000

Name.	Location.	Yearly Expenses.	No. of Students.	Male or Female.	Assets.
Un. of Chicago	Chicago	500	6,802	Both	30,972,000
Un. of Illinois	Urbana	440	5,200	Both	4,543,000
Armour Ins. of Tech.	Chicago		1,400	Male	5,000,000
Indiana:					
Indiana Un.	Bloomington	225	2,530	Both	1,500,000
Un. of Notre Dame	Notre Dame		1,000	Male	.....
Valparaiso	Valparaiso	167	5,000	Both	1,000,000
Purdue Un.	Lafayette	360	2,197	Both	2,187,000
Iowa:					
Drake Un.	Des Moines	300	1,593	Male	1,300,000
Un. of Iowa	Iowa City		2,606	Both	3,250,000
Iowa St. C. A. & M. A.	Ames	400	2,882	Both	921,000
Kansas:					
Ottawa	Ottawa	204	344	Both	400,000
Un. of Kansas	Lawrence	215	2,715	Both	2,662,000
Kansas State Ag.	Manhattan	274	2,927	Both	2,500,000
Kentucky:					
Un. of Kentucky	Lexington		1,223	Both	603,000
Hamilton	Lexington	325	296	Female	300,000
Kentucky Ag. & M.	Lexington		681	Both	468,485
Louisiana:					
Tulane Un. of Louisiana	New Orleans		2,833	Male	6,600,000
Louisiana State Un. Ag. & Mech.	Baton Rouge	215	716	Both	848,000
Maine:					
Bowdoin	Brunswick	350	422	Male	3,460,000
Un. of Maine	Orono	275	1,075	Both	980,000
Maryland:					
Johns Hopkins Un.	Baltimore	400	1,269	Both	8,150,000
Un. of Maryland	Annapolis	300	1,400	Male	1,500,000
Hood. Col.	Frederick		300	Female	300,000
Massachusetts:					
Amherst	Amherst		429	Male	3,675,000
Harvard Un.	Cambridge	400	4,354	Male	24,907,000
Tufts	Medford	400	1,096	Male	2,145,000
Williams	Williamstown	400	495	Both	3,473,000
Radcliffe	Cambridge	650	564	Female	1,900,000
Smith	Northampton	450	1,550	Female	3,573,000
Wellesley	Wellesley	475	1,480	Female	3,700,000
*Mass. Ins. of Tech.	Boston	450	1,611	Both	10,500,000
Michigan:					
Olivet	Olivet	250	250	Both	500,000
Un. of Michigan	Ann Arbor	300	5,805	Both	4,672,717
Mich. State Ag.	Lansing	450	1,530	Both	1,415,000
Minnesota:					
Un. of Minnesota	Minneapolis	280	7,382	Both	10,037,000
Albert Lea	Albert Lea		139	Female	223,000
Mississippi:					
Miss. Ind. Ins. & C.	Columbus		853	Female	800,000
Miss. Ag. & Mech.	Starksville	150	1,150	Male	1,150,000
Missouri:					
St. Louis Un.	St. Louis	260	1,438	Male	.....
Un. of Missouri	Columbia	200	3,349	Both	3,758,000
Washington Un.	St. Louis	400	1,548	Both	11,993,000
Montana:					
Un. of Montana	Missoula	350	500	Both	250,000
Montana Ag.	Bozeman		537	Both	1,506,000
Nebraska:					
Nebraska Wesleyan	University Pl.	310	891	Both	361,000
Un. of Nebraska	Lincoln	375	3,823	Both	3,613,000
York	York		443	Both	180,000

Name.	Location.	Yearly Expenses.	No. of students.	Male or Female.	Assets.
Nevada:					
Un. of Nevada	Reno	275	300	Both	615,000
New Hampshire:					
Dartmouth	Hanover	350	1,331	Male	5,264,000
New Jersey:					
Princeton Un.	Princeton	400	1,599	Male	5,195,000
Stevens Ins. of Tech.	Hoboken	570	324	Male	2,000,000
New Mexico:					
N. M. of A. & M. A.	Mesilla		372	Both	300,000
New York:					
Columbia Un.	New York	650	9,840	Male	45,000,000
Cornell Un.	Ithaca	400	4,635	Both	15,895,000
Fordham	New York		1,324	Male	210,000
New York Un.	New York	450	4,400	Both	5,771,000
Syracuse Un.	Syracuse	350	3,800	Both	4,852,000
Barnard	New York	550	774	Female	3,000,000
Vassar	Poughkeepsie	525	1,073	Female	4,500,000
North Carolina:					
Wake Forest	Wake Forest	235	459	Male	661,000
Un. of No. Carolina	Chapel Hill	385	875	Both	2,700,000
North Dakota:					
Un. of No. Dakota	Grand Forks	200	1,075	Both	2,496,000
No. Dakota Ag.	Fargo	250	1,322	Both	885,000
Ohio:					
Ohio State Un.	Columbus	375	4,111	Both	5,740,000
Ohio Un.	Athens	210	2,037	Both	1,360,000
Ohio Northern	Ada	350	1,740	Both	250,000
Case Sch. of Ap. Sc.	Cleveland	330	531	Male	3,500,000
Oklahoma:					
Un. of Oklahoma	Norman	200	1,210	Both	4,000,000
Okla. Ag. & Mech.	Stillwater		1,850	Both	808,000
Oregon:					
Un. of Oregon	Eugene	300	1,257	Both	900,000
Oregon Ag.	Corvallis	300	2,314	Both	1,500,000
Pennsylvania:					
Lehigh Un.	So. Bethlehem	475	632	Male	2,500,000
Penna. Military	Chester		100	Male	.....
Penna. State	State College	275	2,810	Both	2,418,000
Un. of Penna.	Philadelphia	400	6,323	Both	18,000,000
Un. of Pittsburgh	Pittsburgh	455	2,650	Both	2,355,000
Villa Nova	Villa Nova		394	Male	.....
Wash. & Jeff.	Washington	260	332	Male	1,218,000
Bryn Mawr	Bryn Mawr	500	467	Female	3,842,000
Rhode Island:					
Brown Univ.	Providence	425	961	Male	4,277,000
South Carolina:					
So. Carolina Mil. A.	Charleston		211	Male	350,000
Converse	Spartansburg		300	Female	600,000
Clemson Ag.	Clemson	220	811	Male	1,330,000
South Dakota:					
Un. of So. Dakota	Vermilion	200	425	Both	1,500,000
So. Dakota Ag.	Brookings		851	Both	597,000
Tennessee:					
Tennessee Mil. Inst.	Sweetwater		165	Male	125,000
Un. of the South	Sewanee	245	246	Male	750,000
Un. of Tennessee	Knoxville	265	4,489	Both	1,610,000
Vanderbile Un.	Nashville	325	1,046	Both	4,000,000

Name.	Location.	Yearly Expenses.	No. of Students.	Male or Female.	Assets.
Texas:					
Baylor Un.	Waco	650	1,531	Both	725,000
Un. of Texas	Austin	250	3,391	Both	4,000,000
Baylor Female	Belton		449	Female	231,000
Utah:					
Un. of Utah	Salt Lake City	250	1,053	Both	626,000
Utah Ag.	Logan	225	1,200	Both	.....
Vermont:					
Norwich Un.	Northfield	420	187	Male	300,000
Un. of Vermont	Burlington	300	600	Both	3,000,000
Virginia:					
Un. of Virginia	Charlottesville	375	887	Male	4,000,000
Virginia Mil. Inst.	Lexington	425	375	Male	675,000
Wash. & Lee Un.	Lexington	260	456	Male	1,358,000
Randolph-Macon	Lynchburg	360	576	Female	697,000
Hollins	Hollins		250	Female	200,000
Washington:					
Un. of Washington	Seattle	325	2,824	Both	5,400,000
Washington Ag.	Pullman		1,537	Male	8,500,000
West Virginia					
Bethany	Bethany	180	400	Both	900,000
West Virginia Un.	Morgantown	200	1,271	Both	1,000,000
Wisconsin:					
Beloit	Beloit	325	395	Both	1,850,000
Marquette	Milwaukee		1,606	Male	500,000
Un. of Wisconsin	Madison	310	5,748	Both	6,675,000
Wyoming:					
Un. of Wyoming	Laramie	280	329	Both	750,000
National:					
U. S. Military Academy	West Point, N.Y.	None	613	Male	Unlimited
U. S. Naval Academy	Annapolis, Md.	None	785	Male	Unlimited

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MORAL WELFARE

Necessity for Knowledge. The moral welfare of a boy is indissolubly linked with his sexual condition; yet this is where he has least real knowledge of his own and least guidance by his parents. Any boy knows that whiskey is bad for him, that evil companions will gladly lead him to a saloon, and that he may acquire a taste for alcohol which will be a weakness all his life. The parents always warn him of the above evils and his knowledge is perfect. He will likewise know of the hold which gambling acquires on a man, and he will have examples shown him of such human wrecks.

But on the subject of sex, which is far more important and beset with many more dangers and temptations than all the others together, his parents are foolishly silent and leave him to learn by experience and often by misfortune.

Puberty. At the age of 12 or 13, the boy first begins to feel development and growth of his sexual organs. His imagination begins to picture to him certain association or even intercourse with females. Contrary to girls who avoid such subjects, and can not imagine unknown things, the boy is thoroughly cognizant of these matters and has no difficulty.

As a result of such imagination, he lies awake at night and considers these things. His penis becomes erect, and remains so for hours. It even becomes physically painful, aching a little or a great deal. If not physically tired, he will remain awake far into the night.

A wise parent will retain the confidence of the boy to such an extent that the subject can be discussed. The remedy is not perfect, but is helpful. Continual exercise, avoidance of such thoughts, and sleeping on the side or stomach are all that are necessary to pass the crisis; it will be difficult, but will-power can do the rest. Cold water baths are very efficacious. After two or three months, the strange condition will have lost its novelty, and the nightly erections will not be painful or troublesome.

Moral Aspect. From the ages of 15 to 21, the boy is more apt than at any other time to be tempted to sexual intercourse. Books and male advisors generally argue only as to the dangers of such intercourse; and it is true that these dangers are many and fearful; they are fully described farther in this chapter. However, arguments of danger will not deter a boy of 15 or over. He has no fear of present danger of any kind, sexual or otherwise, and the threatened effects many years hence of venereal disease will not now cause him to hesitate. He is at the chivalric age (see Chapter on Children), and an appeal to his sense of honor, his protection of girls, his moral stamina, his religious sentiment, and even to his control of self under suffering will more than anything else cause him to keep continent. His romantic faculties are particularly strong, and he is much more apt to see the moral wrong now than he would be later. If possible, he should be made to promise that he will abstain from such intercourse until the age of 21. If he is not a bad boy, he will make such a promise, and he will probably keep it.

Especially should a parent be on such terms with the boy that a promise of this kind can be made, and no desperate fear of pun-

ishment should be inculcated so that the breaking of this promise will not be acknowledged. This is the most critical period in the life of a boy, and he should receive all possible assistance in his ignorance of the real facts of sexual hygiene.

Injury by Youthful Intercourse. It is just as well to be sensible in dealing with the boy. Tell him facts, not theories. Do not tell him that youthful intercourse will prevent his full physical development; for he will not believe it, as he can point out very large men of whom it is known that they have been immoral from their early youth. Tell him only that it is the hardest of all habits to overcome; that alcoholic thirst is tame beside it; that once started, it is a continual torment to prevent over-indulgence, and that over-indulgence surely leads to permanent physical weakness. Tell him also that it is a great moral wrong, and incidentally fraught with dangers by disease.

Quite often, the undeveloped parents of early marriages in India are cited as proofs of such arresting of physical developmnt by early intercourse. This not correct. The parents are undeveloped because they are children of immature fathers and mothers. Not all the parents are undeveloped; not half of them. Since marriage destroys the imagination and renders sexual intercourse a matter of proper relationship, there is no over-indulgence and it is certain that a boy married at 17 would be at 21 fully as strong and as healthy as a continent boy, but both would be stronger and more healthy than an immoral one who had over-indulged. The laws of this country forbid youthful marriage, not to save the parents, but to prevent the production of offspring which would necessarily be weak if born of parents who had not attained their full growth.

Self Abuse. As stated in the chapter on Married Sexual Life, self abuse is proclaimed as a cause of sterility. This is not often the case. It is very bad for the nervous system, is bad for the intellect because of its weakening of the moral fibre; but its effects are not permanently disastrous unless as a result of over-indulgence. However, over-indulgence and self-abuse almost always go together. A warped intelligence which shows self-abuse will surely not limit itself. This is the great danger. At the age of say 15, the boy lies awake and in some pain, and it is very natural that he should handle his organs, and often ultimately arrive at self-abuse.

Unless morally very strong, he will some times do this; and if morally very weak, he will immoderately perform this act, and will become a wreck physically and mentally. If the parent finds that the boy has become addicted to this habit, he should at once be provided with a wife, for in no other way can this weakness be fully cured. Appeals to his moral strength will be of no avail; the boy's moral strength has already gone from him.

Nightly Emissions. As a natural result of reaching the age of puberty, the boy will have nightly emissions. There is no danger whatever in these, and the boy should understand this thoroughly. In fact, such wet dreams are an almost necessary result of continence, are at least an evidence of continence, and are really a physical benefit.

Too frequent recurrence of such dreams are weakening. For a nervous boy, twice a week is not unusual. The number may be reduced by cold baths, sleeping on side or stomach, sleeping with a belt (buckle in back), exercise, and repression of immoral thoughts. For a strong, healthy boy, one nightly emission a week is not abnormal.

Venereal Diseases. Gonnorrheœa is the most prevalent of the venereal diseases. The first symptons generally appear between the second and fifth day after intercourse. There is first a little tingling in the orifice of the penis, followed by a slight pain in urinating. This is followed by a little discharge, at first thin or whitish, but soon thick and yellow or light green. The body aches in sympathy, and there is often a slight fever. The treatment should be undertaken by a very good physician who makes a specialty of such diseases. The average doctor may be the cause of a lifetime disaster. Physicians who are ignorant on the subject, and most of them are, invariably prescribe some kind of injection of potassium permanganate. In nine cases out of ten, these injections drive a few of the germs back into the prostate gland where they thrive, often for years. It is almost impossible to get rid of them if they ever reach thre prostate gland, and they generally get into the tube leading to the testicles and in 60 per cent of cases, cause sterility of one or both testicles. If the physician suggests any such treatment as injections, administered by a syringe in inexperienced hands, it will be best to get another physician at once. Nor would it be sufficient to let the disease run

its course, for such neglect often results in the germs reaching the prostate gland and causing the same troubles stated above.

The evil effects of gonorrhœa are spread very broadly. This is due to the fact that the average man does not know that he is not cured of gonorrhœe when the discharge ceases. He experiences no pain after cessation of discharge; and the germs may flourish in the prostate gland for years without really causing pain, although quite often his diseased prostate will cause his death at age of 50 or more. It is unfortunate that the disease is not more evident, because it is invariably transmitted to his wife; and hospital statistics now prove that uncured gonorrhœa of the husband causes at least half of the mysterious female diseases. Cases are known where gonorrhœa has been transmitted to the wife two or more years after all discharge has ceased. The complement fixation blood test is the surest proof of presence or absence of gonorrhœal infection. Advertisements are found in medical journals, it costs $10, and blood can be sent by mail.

Syphylis is the most horrible and the most incurable of all venereal diseases. Its effects are not so widely distributed as those of gonorrhoea, because it is known that syphylis is very rarely cured, and there is no deceptive appearance of cure as in the case of gonorrhœa. Men recognize its horror and will accept the statement of the physician that it may remain for two or three years after apparent cure, while the physical pain of gonorrhœa is so little that men will not believe that it is not cured.

Although syphylis may be caught in other ways, it is generally as a result of sexual intercourse. Some two or three weeks after intercourse, it appears as a reddish pimple generally on the head of the penis; developing soon into an ulcer which breaks and discharges. This is followed by pain in the groins, red pimples on the skin, and whitish spots on the lips and tongue. The disease gradually becomes worse, eyes become sore, throat sore, pains in legs, arms, joints, etc. This gradually wears away, but if not properly treated, the bones, joints, and cartilages are finally attacked, resulting in wreckage of the whole body.

Treatment should be made by a reputable physician. The mercury treatment is generally followed; although there are some recent medical discoveries which claim a quicker cure. It is possible to effect a cure, but it is recognized that it is a matter of two

or more years, with some ultimate doubt of final cure. The Wasserman blood test, possible by mail, cost $10, is a final test of the effectiveness of the cure.

Preventives of venereal diseases are quite efficient, but are not always certain. In Denver, the immoral women were segregated and all examined, and it was found that 90 per cent were affected by venereal disease; so it is certain that a boy who has intercourse with such women, will sooner or later catch a venereal disease. Certain precautions can be taken however, as follows:

(a) Condoms; these are rubber sheaths which are placed over the penis. They are sold "for prevention of disease only," and they will prevent disease provided they do not break, and are properly handled so that they are effective as a sheath throughout.

(b) Mercury bichloride tablets—used as an antiseptic wash. They are sold in little glass bottles labeled "Poison." Two tablets in a half basin of water are sufficient to kill all germs with which the water comes in contact.

(c) A ten per cent solution of Argyrol used as an antiseptic wash, and also as an injection for not over an inch. If injected more than an inch, the germ may be driven back into the prostate gland. This wash is applied in full strength or half weakened by water.

Sexual Intercourse Not Necessary. It is claimed by many men, among them reputable physicians, that sexual intercourse is necessary for the physical and mental health of a boy or man. This is not entirely correct. Many instances are known where men have remained continent until 40 years of age, have retained practically the full use of their mental and physical faculties, and have then produced strong and healthy children. Lack of intercourse has no effect whatever on the mental or physical health of a normal man: but it is a fact that the sexual powers and the sexual organs are not so well developed in a continent man as in one not continent. The sexual organs of a man, like other organs of the body, would become atrophied by lack of use if nightly emissions did not keep them in shape; but a little exercise after marriage soon produces complete development in the male as in the female. It is, however, undoubtedly true that, if nightly emissions cease, the sexual organs are becoming atrophied and are in need of exercise. Before acting upon any such con-

clusion, however, a man of 38 should remember that his sexual organs and imagination are not as active as they were at 19, and one nightly emission in two months is sufficient evidence that these organs are in proper condition.

The same moral standard for both men and women is often advocated by married couples, and by unmarried women. It is not probable that it will be attained. Without any desire to preach to either men or women, I will say that both are to blame for the present situation. As soon as married, a woman often ceases to be a partner, and becomes a burden. The young man sees such cases around him, and does not wish to assume such a burden early in life, on a small salary, with prospects uncertain. Likewise, wives are expensive, and the young man knows this. If not married before 30 years of age, he has certainly considered thoroughly the matter of sexual intercourse. It is simply a question of moral wrong or physical danger. In general, he accepts the moral wrong and risks the physical danger.

A women is naturally virtuous; it is practically certain that no women ever entered on an immoral career purely for the pleasure she expected to experience. A woman has to consider the loss of virtue as a mental loss, a moral loss, a physical danger, and finally fear of detection. If she should succumb to the other three, she will finally hesitate and turn away before the fear of detection. The difference in the moral attitude of men and women has become accentuated during the centuries, until now the known immorality of a woman is sufficient to cause her to be avoided as a companion, while the known immorality of a man is a matter of no comment, but even some times of amusement.

In the future, a greater knowledge of the physical dangers of disease will probably cause an improvement in the moral standard of man, but he will never have the same incentive for morality and will never attain the same moral standard as women.

CHAPTER XIV.

DAUGHTERS.

General Remarks: The information in this chapter is intended to cover the life of a girl from the ages of 12 to 20. Before the age of 12, the character and habits of the girl have received their most important training, but further intellectual and practically all physical training must be taught the girl after the age of 12. As a general rule the average mother has had it sufficiently impressed upon her that the age of puberty is the most dangerous to the future health of her daughter, but all sexual matters are so surrounded by an air of mystery with women, that it is well to call attention to the common errors, and give some few instructions on this subject.

It would be well to have the daughter read this chapter; it will be easier to start her training in this manner. Also, it will show her the necessity for care and attention to herself during these eight important years of her life.

The subject is considered in three parts; Moral Welfare, Physical Welfare, Intellectual Welfare.

MORAL WELFARE.

Necessity for Knowledge. The moral welfare of a girl is dependent upon her sexual condition. By this is not meant that her morals need careful scrutiny, but is meant that her sexual condition during the age of puberty is an index of her mental condition, her moral attitude, and her physical health. The average girl has no tendency at all toward immorality; in this she is very different from a boy, who has temptations and habits conducive to immorality. The knowledge of young girls is very little. This is very well for her morals, but it has the disadvantage that the young girl knows much less about herself than does a young boy; in fact she knows very little about herself, even less than a young boy knows about her. This ignorance of herself, and consequent bashfulness on subjects sexual, quite often leads her to do things very disastrous.

Puberty: At about the age of fourteen to sixteen, the young girl first begins to have her monthly sickness. She has a fullness

of the breasts, and the discharge of the vagina. The average age for such discharge is 15 years; but it is by no means uncommon to find it in girls of 12 years or 19 years. If it comes at an early age, or even late, there is no need for alarm. It does not come earlier in warm climates, as is generally supposed. If the general health is good, the failure of menstruation to appear at say 14 years need cause no concern whatever. Quite often, mothers use artificial means to bring on menstruation; this is injurious and not at all necessary.

The mother should carefully watch her daughter for signs of approach of her first menstruation. It is best to explain these matters fully at about the age of 12, so there can be no mistake. If ordinary rules of diet are followed, there need be no fear of trouble of any kind. If there is positive evidence of its approach, more careful rules of diet will be beneficial. Slowly digesting meats, alcohol, coffee etc. should be forbidden; and quickly digesting foods such as milk, rice, chicken, and fruit prescribed. Apart from diet, the girl should take some exercise in the open air, but not so much as to be exhausting. Warm baths should be taken every other day, followed by a cold shower. Particular care should be taken that the feet are not wet and that the girl does not take cold. Regularity of emptying the bladder and intestines is important, because the bladder and intestines are very close to the womb and have marked effect on it.

At some period before the first menstruation, but not necessarily immediately before it, the body of the young girl undergoes certain change; the hips broaden, the breasts enlarge; nipples become prominent; the special organs of generation, uterus and vagina and external parts, enlarge and show marked development. The first menstruation is not always preceded by disagreeable symptoms; though, at times, it is possible to predict its very near approach by continued nervousness and some or all of the following symptoms: colicky pain in the lower part of the abdomen; distention of the bowels with gas; aching pains in the back and thighs, fullness in the head, a slight fever, a feeling of excitement, mucus discharge from the vagina.

Physiology of Puberty: Menstruation is an evidence of the approach of development of an ovum from the ovaries, but has no direct bearing on such development. The discharge is practically

continuous and is caused by an accumulation of blood in the womb and its related parts. The blood begins to accumulate immediately after the cessation of the last discharge. It is real inflamation, just as there is inflammation around a splinter in the finger. The temperature is even found to vary slightly as the amount of blood accumulated increases.

Upon cessation of menstruation, the ripened ovum leaves the ovaries, travels slowly into the womb, and is expelled through the vagina. The ripened ovum does not leave the womb in the menstrual flow. The time for this progress is about eight days, as explained in the chapter on Married Sexual Life. If the ovum is fertilized, all of this accumulated blood is used in nourishing the unborn child, and menstruation generally ceases during pregnancy. Likewise, almost invariably, menstruation ceases during nursing of the child. There must be some relation between menstruation and development of the ovum, although it is not yet determined, for no ova are developed and there is no conception during pregnancy and very rarely during nursing. On the average, menstruation occurs every 28 days, lasts four days, and the total discharge is about as much as six ounces (near a tumbler full).

Precautions. As so little is generally known by a woman about menstruation, there are many errors committed, some of them very serious. The average woman does not know that there are no fixed rules as to the amount, lengths, periods etc., but judges all girls by her own experience. It is well that girls are somewhat reticent; otherwise, other women's advice would cause them much trouble.

About sixty per cent of women menstruate every 28 days, but periods of three weeks to six weeks are not at all uncommon. Four days is the usual length of discharge, but one day or seven days is not uncommon. Six ounces is the average amount, but perfectly healthy cases are known where there is no blood whatever. One fixed rule can be followed: If the health is good, and the periods regular, the amount and length should be left alone. It is not a matter for experiment. For some thirty years during a women's life, it seems that her whole physical being is engaged in its function of ripening these ova, and expelling them in connection with menstruation, or after fertilization, in developing one during pregnancy. During this time, the woman's mind as well as her

body is engaged in this function, and other matters cannot consistently and continually occupy her attention. If forced to undergo great bodily or sustained mental exertion, her physical development is deranged.

This is not intended as an argument for socalled feminine weaknesses, called peculiarities. These are entirely unnecessary, and are likewise a detriment to the health. If carefully started during her first periods, there is no reason why a girl should not be fully as healthy as a boy during the same age. Nervous diseases of girls are generally due not to physical pecularities but to mental deficiencies induced by erroneous teachings of her family or friends.

Especial care should be taken not to let the feet get wet or to catch cold. Cases have been known where girls have deliberately stood in cold water in order to stop the flow. This is very bad; the flow should not be stopped, if normal. If abnormal, a reliable physician should be consulted.

The girl should avoid excitement, particularly mental stimulation of the sexual organs. This is rare but should be considered. She should not be allowed close companionship with boys during the first few months of menstruation, until she has become familiar with the matter and it is no longer a cause of mental excitement, Any irrational or absurd acts of the girl during her first periods should receive careful consideration, and even treatment; under no circumstances should she be led to believe that her case or her inquiries are unusual. A morbid sense of shame should by all means be avoided; curious questions should be fully answered, in fact, should be even anticipated. A sense of pride should be developed in the marvels of her physical development, in the powers so latent; and a proper sense of modesty and bashfulness should by no means be allowed to become a cause for concealment of any unusual troubles or dangers in this important function of womanhood.

During the duration of the periods, complete rest is necessary; only such exercise should be taken as is desired; there should be no exertion; cold baths should be avoided unless previously taken regularly. Food should be carefully selected, and be quickly digested (see Chapter on Food).

Diseases: Venereal diseases are not discussed here. They are rare among girls of fairly decent habits, and they are invariably

acquired by contamination from some male who is carrying the disease. As these diseases of females are described in the same reference books mentioned in the chapter on sons, they may be consulted for information.

Inflamation of the external lips is caused by carelessness in keeping clean. The treatment is very simple; bathe often in cold water, apply some cooling salve.

Itching of the external parts is very rare, but is a possibility. It is generally caused by weakness of the general health, particularly by constipation. If caused by impurity of the blood, the same itching may be elsewhere, and some blood medicine is advisable. If caused by constipation, sitting in cold water for five minutes twice a day is about as good as anything. The habit of regular movement of bowels early in the morning should be acquired.

Leucorrhœa is a discharge from the vagina of a mucus or pus, generally whitish. The discharge is very similar to that from gonorrhœa. If there is any cause for suspicion, examination should be made for germs of gonorrhœa. Leucorrhœa is not at all uncommon and many girls are very miserable over it. The disease is caused by inflamation of the mucus membrane of the vagina or womb; and is likewise caused or accompanied by general weakness. It may be caused by anything which will weaken the system, such as cold, too much alcohol, vicious habits, want of exercise and fresh air, too much warm bathing, etc. A reliable physician should be consulted when there is positive evidence of leucorrhœa. There are many serious results possible from effort to cure same at home. If complete rest does not effect an immediate cure, further home remedies are not advisable.

Inflamation of the ovaries, fallopian tubes, or womb is caused by sexual excitement. It is similar in a general way to erection in a boy. In very romantic or highly sensitive girls, it is not at all unusual. If the general health is good, it can be caused by dancing and companionship of boys, and is very often caused by long engagements. Mothers are somewhat careless in this respect. Generally, the results are not serious. If caused by ill health, the health should be carefully improved. If caused by mental excitement of the sexual organs, the cause of such excitement should be removed; the bowels must be kept open, the hands and

feet warm. If there is a discharge of mucus, the matter is very serious, there is danger of an abscess or derangement of the organs; a physician should be consulted.

Self-abuse among girls is very rare, but it is not entirely missing. Its effects are practically the same as in the case of boys. (See Chapter on Sons). The remedy is difficult; in fact, more difficult than in the case of the boy. Marriage is the one cure. Cold baths, exhausting exercise, and a thorough explanation of the evil results are necessary, advisable, and of lasting benefit in the cases of those who are not mentally weak. For these last, some kind of physical restraint may be necessary. As the ultimate effect of continued self-abuse is insanity and impotence, this matter should be considered of prime importance.

Chaperons: Escorts of older women in charge of young girls have for centuries been required. The chaperon of today corresponds to the duenna of Spain, and to the keepers of the harems in Turkey. In a country like this, where the intelligence of the women is very great, the necessity of chaperons practically ceases. However, there are times when these women are available as a refuge for young girls, and as confidants in matters requiring immediate decision. The young girl is ignorant, and does not realize that too close contact with boys and excitation of her sexual organs is productive of real physical harm. It is her opinion that as long as there is no moral wrong, there should be no objection. The greater experience of her chaperon will be of great benefit to her physical health if she forbids any games or attitudes which may lead to such sexual excitement. As stated in the paragraph on diseases, several serious troubles are caused by sexual excitement.

It is also a fact that until she has acquired full development and full knowledge of the sexual relation (and often afterward), the young girl is weaker in resisting power than a man; and the chaperon should make it her duty to see that no opportunities occur for a man to endeavor to break down the ignorant or moral scruples of the young girl. At her own home, efforts by men at seduction are not so apt to be successful as under the excitement of an entertainment.

For more detailed information see Confidential Chats with Girls, Howard, price $1.25.

PHYSICAL WELFARE

At about the age of twelve, the physical differences between girls and boys first begin to manifest themselves. Up to that time, except for certain established customs, there is no real reason why girls and boys should not take part in the same games and studies. However, since at that age the separation must be very distinct, it is just as well that the preparation for such separation begin at an earlier period.

At the age of puberty, the young girl becomes very bashful and timid. A knowledge of the fact that she is physically a different being is for the first time brought to her attention. She becomes exceedingly sensitive, and for the first time develops the unreasoning and sometimes irrational traits which are utterly foreign to the masculine mind. She also develops a loving disposition, a sense of physical dependency, and sometimes mental dependency on her brothers. Her physical development undergoes radical change. Her breasts become rounded, her form becomes more symmetrical. Sometimes she also experiences very rapid growth of bones and muscles.

At any rate, her whole system is undergoing somewhat of a strain mentally and physically, and no undue exertion should be placed on her. She should be forced to take a certain amount of exercise; but it should not be at all violent. Fresh air is preferable during such exercise; hence walking, skating, etc, are recommended. Such exercise shonld not be excessive, should not weary her, but should be sufficient to secure full development. A lack of such exercise will result in later life in extreme stoutness without the proportionate amount of muscular and bony tissue.

Sufficient food and plenty of sleep are the best remedies for a seeming indisposition. Without too much interference, it will be possible to judge as to just how much is necessary. Unless the girl was indolent before this time, it will be well to let her judge as to what is desired.

In about two years after commencement of menstruation, it is probable that there is no further possibility of derangement of any of the vital organs, and more regular, systematic, and fatiguing duties should be exacted. This is particularly necessary when fullness of form has not been acquired. Certain exercises are suitable for certain weaknesses of muscle; but as none are injurious,

no special warning need be given. In the majority of cases, any system of setting up exercises comprising trunk exercises, chest exercises, etc, as can be found in handbooks, will be all that is necessary. Naturally, no violent exercise should be indulged in, either now or later; in fact never after the age of puberty.

It is customary for certain people to exclaim loudly against late hours, parties, etc. Such late hours are injurious if there is the usual accompaniment of indulgence in stimulants; it is also injurious if the proper amount of rest and sleep is not received. The main objection lies in the irregularity of habits. A girl who spends every evening at some party until twelve o'clock will be just as healthy as her sister who goes to sleep each night at nine o'clock, provided the first girl sleeps three hours longer each morning; but she will eventually injure her health somewhat if she goes to sleep some nights at nine o'clock and on other nights at twelve o'clock.

Corsets are generally believed to be extremely hurtful to young girls. This is true, provided the corset is too tight and is ill fitting as was generally the case several years ago. But the modern corset is somewhat of a benefit to a young girl in that it helps to hold her erect, increases her pride in her appearance just when she is extremely sensitive, and there seem to be no authentic case where real injury has been done by the recent large waisted corset.

Food: In the Chapter on Food, there is a table showing the calories of proteids and fats in each article. Naturally, the food for a girl at this critical period should be such as will build up her bones and tissues, and prevent undue excitement. In general, ordinary food, not too rich in fats, will be satisfactory. Especially valuable foods for growing girls are meats, oatmeal, baked beans, etc., while the least valuable are sugar, candy, butter, cream, cake, etc. These last are not harmful; but both cannot be eaten because the appetite wil not stand it. The former are necessary for proper growth; the latter are of no particular value and can only serve to decrease the appetite for the former.

INTELLECTUAL WELFARE

As in the case of a growing boy, the intellect of a young girl is not weakened by her rapid growth or by her physical changes,

but her nervous system is more sensitive, her imagination is increased, and her reasoning powers are not greatly strengthened. Owing to the fact that all her physical faculties are concentrated in her physical growth, it is not desirable to force great exertion or activity on her mental faculties, as they are surely identified and occupied with her physical growth.

School Course: The high school course is not difficult, and the young girl should surely take this course. In addition a certain amount of house duties should be required of her, as these are not necessarily fatiguing. No house duties should, however, be assigned her that will interfere with her proper rest and sleep. A certain amount of account keeping and a knowledge of cooking should surely be required. Sewing is not advisable during these few years. It is not exercise, is hard on the eyes, and the usual sewing as at present required is rather uselesss. A sewing machine should be avoided by her just at this time, if possible.

College: A college education is not as necessary for a girl as for a boy. The curriculum of the average girls' college is of no particular value in her future life. As a general education, it is rather useful, and all possible general education should be acquired; but a course at some domestic school will be of real value.

Naturally, a certain amount of self-confidence is acquired at college, but the necessity for such self-confidence is not so great with a girl as with a boy. The young boy learns to compete with other boys in later life. The young girl never needs to compete with other girls in later life, consequently she does not acquire this benefit from a college course.

However, a college life is a source of much pleasure to a young girl; she forms friendships which are lasting, and feels that she is at no disadvantage in her preparation for life. This is the advantage of college for a girl, and she should be given this advantage, if possible; but the most important advantages acquired by a boy in his college life, viz, preparation and self-confidence, are not acquired by her.

There is one very important reason why young girls should not be sent to the preparatory schools, as is the case with boys. In fact, this is recognized to such an extent that there are very few such schools. During the first menstrual periods, the young girl should be placed with companions in whom she has the utmost

confidence, and to whom she will be sure to tell freely her condition. There is no one in whom she is so willing, by confidence and training, to confide as her in mother; consequently. during these first months or even two years, she should not be placed in a college where the teachers are strangers and often considered tyrants. Much injury has been done by thus leaving a young girl to look out for herself under these conditions. The chances are very much against her enjoying as perfect health as would otherwise be the case.

The selection of a college is a matter of some moment. A small college has the advantage that there is greater college spirit and closer companionship. It has the disadvantage that the opportunity for extended acquaintance and better selection of companions is not present. If possible to do so, it would probably be just as well to select either a large college for its advantages as regards numerous acquaintances and much selection, or a small finishing school because of its advantages in the way of extremely careful training and individual supervision.

Cost of College Course: In the Chapter on Sons is given a list of the female and co-educational colleges, with cost, number of pupils, etc. There is no list available for the numerous boarding schools and finishing schools, but their advertisements may be found in any magazine.

Marriage: Of late years, owing to the suffragist movement, it has become customary to treat with scorn the statement that all women should look forward to marriage as their prime goal in life. It is unfortunate that leaders of the suffragist movement deem it necessary to make scornful statements regarding marriage in order to strengthen their cause. The wife, in past years, had certain duties about the home. In the march of industrial events, men and machinery have taken away from her these individual duties, and she now is properly anxious to secure the right of suffrage in order to see that the food is pure, the water of the best quality, that the schools are properly organized, and that the labor of her child or of any children is not too early enforced, thereby stunting growth mentally and physically.

Marriage is the prime object of a woman's life. If she does not find a proper mate, then single life is better than an improper mating. All of the physical functions of a woman during

some thirty years of her life are engaged in preparing her for marriage, and she should endeavor to fulfill her normal functions. If she does not do this, she will eventually lose this power.

Each year, the number of bachelors is increased. This is due to the fact that the average man sees each day the bad effects in the cases of friends with extravagant wives. He does not see the numerous cases where the wives do not act as a dead weight around their husband's necks. When men become convinced that a girl is willing to perform her fair duty and take her fair share of life's problems, for better and for worse, that girl can easily select the best man in her acquaintance and marry him if she wishes. Beauty is an advantage; but man is a being with faculties of reasoning, and no amount of beauty will be able to offset an evident laziness, selfishness, ignorance of life's problems, and unfair expectations of distributions of the disagreeable events of the partnership.

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